Drawing Index

These sheets are a document set and should not be separated.
Electrical information and references are contained on all sheets.

These drawings indicate the placement and interconnection of the listed equipment components. These drawings are not construction or site preparation drawings. Customer remains ultimately responsible for preparing the site to accommodate the operation of such equipment in compliance with GE Healthcare's written specifications and all applicable federal, state, and/or local requirements.

* REQUIRED REFERENCE *

Discovery IGS 730/740

Pre Installation Manual

5481391–1–1EN

A mandatory component of this drawing set is the GE Healthcare Pre Installation manual. Failure to reference the Pre Installation manual will result in incomplete documentation required for site design and preparation.

Pre Installation documents for GE Healthcare products can be accessed on the web at:

www.gehealthcare.com/siteplanning

GE Healthcare

Interventional Site Planning

CUSTOMER ACCEPTANCE

imagination at work

Customer Site Readiness Requirements

- Any deviation from these drawings must be communicated in writing to and reviewed by your local GE Healthcare Installation Project Manager prior to making changes.
- Make arrangements for any rigging, special handling, or facility modifications that must be made to deliver the equipment to the installation site. If desired, your local GE Healthcare Installation Project Manager can supply a reference list of rigging contractors.
- New construction requires the following; 1. Secure area for equipment, 2. Power for drills and other test equipment, 3. Capability for image analysis, 4. Restrooms.
- Provide for refuse removal and disposal (e.g. crates, cartons, packing)
- Contact a radiation physicist or consultant to specify radiation containment requirements.

GE Equipment Delivery Requirements

The items on the GE Healthcare Site Readiness Checklist are REQUIRED to facilitate equipment delivery to the IS site. Equipment will not be delivered if these requirements are not satisfied.

GE Healthcare Site Readiness Checklist Rev 19

Before using this document ensure you have the latest Rev from MyWorkshop on DOC0422752

GEHC Global Order # : ____________ Customer: ____________

GEHC PMI : ____________ FE / Installer: ____________

The customer is responsible for proper site preparation regardless of any GEHC measurements/inspections/assessments.

	GEHC Minimum Requirements	Storage Is item ready?	PMI Is item ready?	FE Is item ready?	Comments If "N", enter comments or action plan
	Inspection Date:				
1	**MR Magnet Delivery Requirements:** Ensure cryogen venting system is available for magnet connection as defined by GEHC Pre-Installation Manual (PIM) requirements, exhaust fan system is installed and operational, 480V power, and chilled water supply is available 24x7 that meets system cooling requirements. External connectivity is available for magnet monitoring and phone service is available during delivery. Surface mount vibromat installed where required. Magnet room final flooring is in place.				
2	**MR RF Screen Room Requirements:** RF Screen Room is tested with copy of Test Report, emailed to ISAdminCOEMB@ge.com, that it is compliant with GEHC specifications. Dock Bolt and magnet anchors (if applicable) installed using 2 part anchor. For HDx systems, blower box mount bolts installed by RF vendor using 2 part anchors				
3	**State Regulatory Requirements:** Facility registration number provided for states of Ill, KY, HI, RI, SC, TX. X-ray shielding plan and state acknowledgment letter provided to installer for AR, DC, NC, SC, CO & WA. **Site Drawing Requirements:** Final version of equipment network and antenna, installation drawings (including red lined versions) verified to match actual room and has been provided to installer.				
4	**Surface Penetration Requirements:** Customer/Contractor scheduled to provide required drilling or cutting into floors, ceilings, and walls; OR surface penetration permit available and posted in the room when GEHC will perform the work.				
5	**Pre-Delivery Route Requirements:** The equipment delivery route from the truck to the final destination within the facility has been reviewed with all key stakeholders to safely meet the minimum requirements for equipment access, and all communications/notifications have occurred. Arrangements have been made for special handling (elevator, rigging, floor protection, fork lift, rollback truck, etc).				
6	**Finished Room Requirements:** Rooms that will contain equipment, including storage areas not in scan suite, are dust free. Provisions taken to maintain a dust free room. Precautions must be taken to prevent dust from entering rooms containing equipment when construction is incomplete in adjacent areas. All walls primed (final coat not needed on Day 1). Shielding, doors, and windows are to be installed. No contractor work being done during or after the installation that will cause dust in the installation areas or potential equipment damage. Room security to prevent unauthorized access and theft has been discussed with customer. The customer is aware of these security issues, implications and responsibility. For Storage: Room must meet PIM requirements for storage.				
7	**Electrical Requirements:** Lockable (LOTO) Main Disconnect Panel (MDP) is installed per GE guidelines and system power is available. Conduits, electrical cable ducting/dividers/cable trays, and access flooring is installed in proper location and height. Surface floor duct and load-side wires can be installed at time of system installation. Validate outlet location and requirements meet specifications for device/equipment.				
8	**HVAC Requirements:** The HVAC/Chilled Water systems designed to maintain the environment per spec/PIM is at running state and appears to provide the desired environmental conditions including location of vents, temperature and humidity for system operation.				
9	**Flooring Requirements:** Floor is clean and prepared for final floor covering. Floor levelness/flatness is measured and within tolerance, and there are no visible defects per GEHC specifications. Confirm customer anchoring plan aligns with designed floor thickness. Final flooring installed where required for network racks.				
10	**Ceiling Requirements:** Unistrut (or equivalent) location, levelness and spacing is measured (or vendor confirmed) and consistent with the requirement of the installation drawings. Ensure unistrut and rails are not used as mounting surfaces. Ceiling grid is installed. Permanent lighting is installed and operational. HVAC diffusers are installed and connected to ductwork. Ceiling tiles installed per PMI discretion.				
11	**Staging Requirements:** Space has been identified to support the active installation process only. This area meets PIM/project book requirements. Storage space has been identified, if needed. This secured space would be used to store equipment indefinitely. If offsite, transportation plan has been developed at customer expense. This space must meet PIM requirements.				
12	**Network Connectivity:** Hardwire for network connectivity(network drop) is in place prior to delivery with specified network firewall configuration where required. Site Surveys for wireless mobile XR units have been completed.				
13	**Medical Gases Requirements:** Systems (hard piped or portable) in place to allow testing and calibration of equipment (anesthesia), including ventilation.				

This drawing is based on Sketch No.: 14146600

PIM R1

RQ – 144293

GE Healthcare

Healthcare Project Implementation – Design Center
Milwaukee, Wisconsin

SHEET TITLE: SITE READINESS

MODALITY TYPE: DISCOVERY 730 (OR)

THIS PLAN IS SUBMITTED TO SUGGEST LOCATION OF GE HEALTHCARE EQUIPMENT AND ASSOCIATED APPARATUS, ELECTRICAL WIRING DETAILS AND ROOM ARRANGEMENTS. IN PREPARING THIS PLAN, EVERY EFFORT HAS BEEN MADE TO CONFORM DETAILS TO ACTUAL EQUIPMENT EXPECTED TO BE INSTALLED. IT IS NOT TO BE USED FOR ACTUAL CONSTRUCTION PURPOSES, HOWEVER, AND THE COMPANY CANNOT ACCEPT RESPONSIBILITY FOR ANY DAMAGES RESULTING THEREFROM.

PROJECT TITLE: V A PALO ALTO

PALO ALTO, CALIFORNIA

PROJECT	REVISION
141466	01

DATE: 19.Jun.14
DRAWN BY: TST
CHECKED BY: LLM
QT. NO: PR11C12818V1
QT. DT: 01.May.14

REVISION HISTORY:

SHEET C1

csah0000–29.JAN.2013

GE EQUIPMENT LISTING

EQUIPMENT ON ORDER FROM GE HEALTHCARE, INSTALLED BY GE HEALTHCARE, PER QUOTE PR11C12818V1 DATED 01.May.14

NOTE: LOCAL CONDITIONS MAY DICTATE THAT ITEMS IDENTIFIED IN THIS CATEGORY BE INSTALLED BY OTHERS.

EQUIPMENT CROSS REFERENCE CHART

SEISMIC STATUS: P = PREAPPROVAL; C = CALCULATIONS/ PENDING APPROVAL; S = SPECIFICATIONS ONLY

ITEM NO.	QUANTITY ORDERED	ITEM DESCRIPTION (* = EXISTING/REINSTALL)	WEIGHT	HEAT OUTPUT (PER HOUR)	DETAIL NO. (REFER TO SHEET "D")	STRC PLAN	ELEC PLAN	SEISMIC
1	1	AW WORKSTATION	81 lbs	1201 btu	M1013AW C7619D	–		C
2	1	LEAD GLASS SHIELD ON VENDOR CEILING BOOM WITH MACH 3 LAMP	79 lbs			–		C
3	2	19 in. MONITOR ON WALL SUPPORT	26 lbs	204 btu	C7619W	–	WBM2	C
4	1	LARGE DISPLAY MONITOR ON VENDOR CEILING BOOM (MOUNT TWO GE MONITORS ON BACKSIDE OF LD MONITOR)	784 lbs	1706 btu		–	LDM WBM1	C
5	1	INJECTOR ON PEDESTAL	90 lbs	320 btu	B5030	---		S
6	1	DETECTOR CHILLER	33 lbs	706 btu	B5049F	---	DC	S
7	1	COOLIX 4100 AUTOTRANSFORMER	66 lbs	153 btu	B-IGS05	–	AT	–
8	1	COOLIX 4100 WATER CHILLER	264 lbs	11737 btu	B-IGS03 B-IGS04	–	CHLR	C
9	1	UPS INTERFACE BOX			E4502IB	–	UIB	–
10	1	ATLAS CABINET (C2)	659 lbs	1825 btu	B0558C	–	C2	C
11	1	ATLAS CABINET (C1)	1115 lbs	3389 btu	B0558C	–	C1	C
12	1	UPS CABINET	1170 lbs	4061 btu	E4502SG	--	UPS	–
13	1	TABLESIDE CART			B-IGS06	–		–
14	1	LARGE DISPLAY MONITOR CABINET	253 lbs	3412 btu	B2014	O	LDC	C
15	1	3 KVA UPS CABINET (LARGE DISPLAY SUBSYSTEM OPTION)	99 lbs	546 btu	B2016	O	UPS3	C
16	1	CONTROL ROOM MONITOR WITH DL KEYPAD	22 lbs	204 btu	C7412H C7619D	---		S
17	1	OPERATORS CONSOLE	22 lbs	546 btu	B5050C C7502 C7619D	–	WBC1	C
18	1	XR BUZZER (LOCATED ABOVE CEILING)	2 lbs		B5150H	–	XRB	–
19	1	INNOVA IQ TABLE	1750 lbs	614 btu	B8162	–	LU5	C
20	1	DISCOVERY IGS 730 MOBILE GANTRY	2094 lbs	3020 btu	B5050S B5050T B-IGS10 B-IGS11 B-IGS01 B-IGS08 B-IGS12 B-IGS13 B-IGS14 B-IGS07 B-IGS02 B-IGS18	B20 086	DIGS	–
21	11	REFLECTOR TARGETS FOR GANTRY NAVIGATION SYSTEM				B20 084		–
22	1	SUGGESTED GANTRY PARKING POSITIONS (MAXIMUM OF TWO) BASED UPON ROOM CONSTRAINTS			B-IGS17	–		–
23	1	CABLE MANAGEMENT SYSTEM	330 lbs		B-IGS15	B20 085	CMS	–

THE FOLLOWING ITEMS, WHICH HAVE BEEN ORDERED FROM GE HEALTHCARE, ARE TO BE INSTALLED BY THE CUSTOMER OR HIS CONTRACTOR.

ITEM NO.	QUANTITY ORDERED	ITEM DESCRIPTION	WEIGHT	HEAT OUTPUT	DETAIL NO.	STRC PLAN	ELEC PLAN	SEISMIC
50	1	X-RAY ROOM WARNING LIGHT/ROOM LIGHTING CONTROL PANEL. REFERENCE JUNCTION POINT 'XRLC' ON SHEET 'E1' FOR DETAILED DESCRIPTION.				–	XRLC	–
51	1	DISCOVERY MAIN DISCONNECT, REFERENCE JUNCTION POINT 'PDB' ON SHEET E1 FOR DETAILED DESCRIPTION.	326 lbs	1532 btu	E4502M	–	PDB	–
52	1	EXTERNAL TRANSFORMER FOR MACH 3 SURGICAL LAMP (MOUNTED ABOVE CEILING OR ON SHELF IN EQUIPMENT ROOM)	70 lbs		CMACH3	–	M3T	–

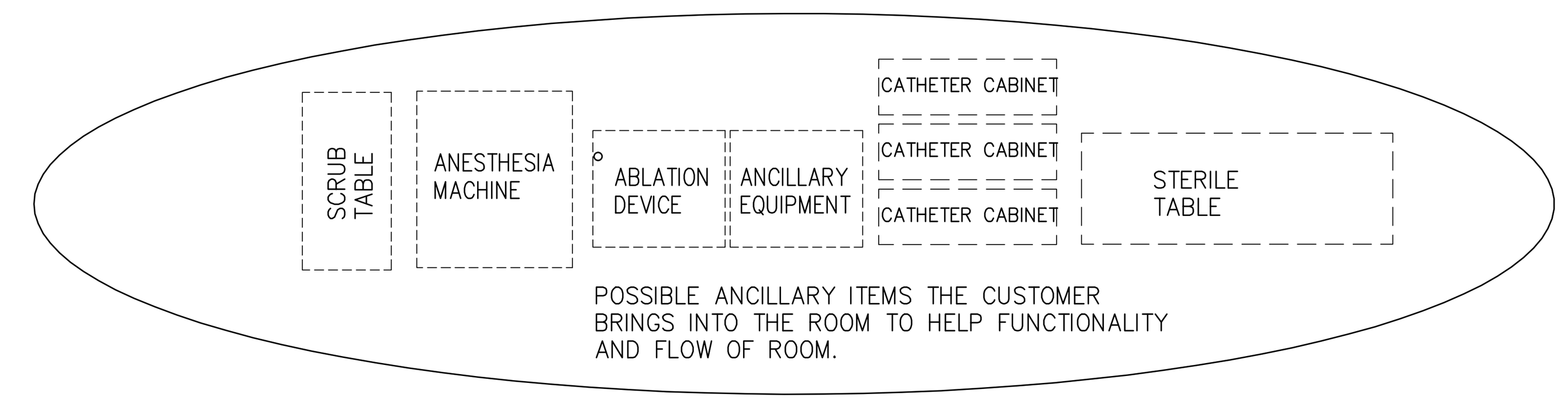
SCALE: 1/4" = 1'-0" — EQUIPMENT LAYOUT — CEILING HEIGHT = 10'-0"

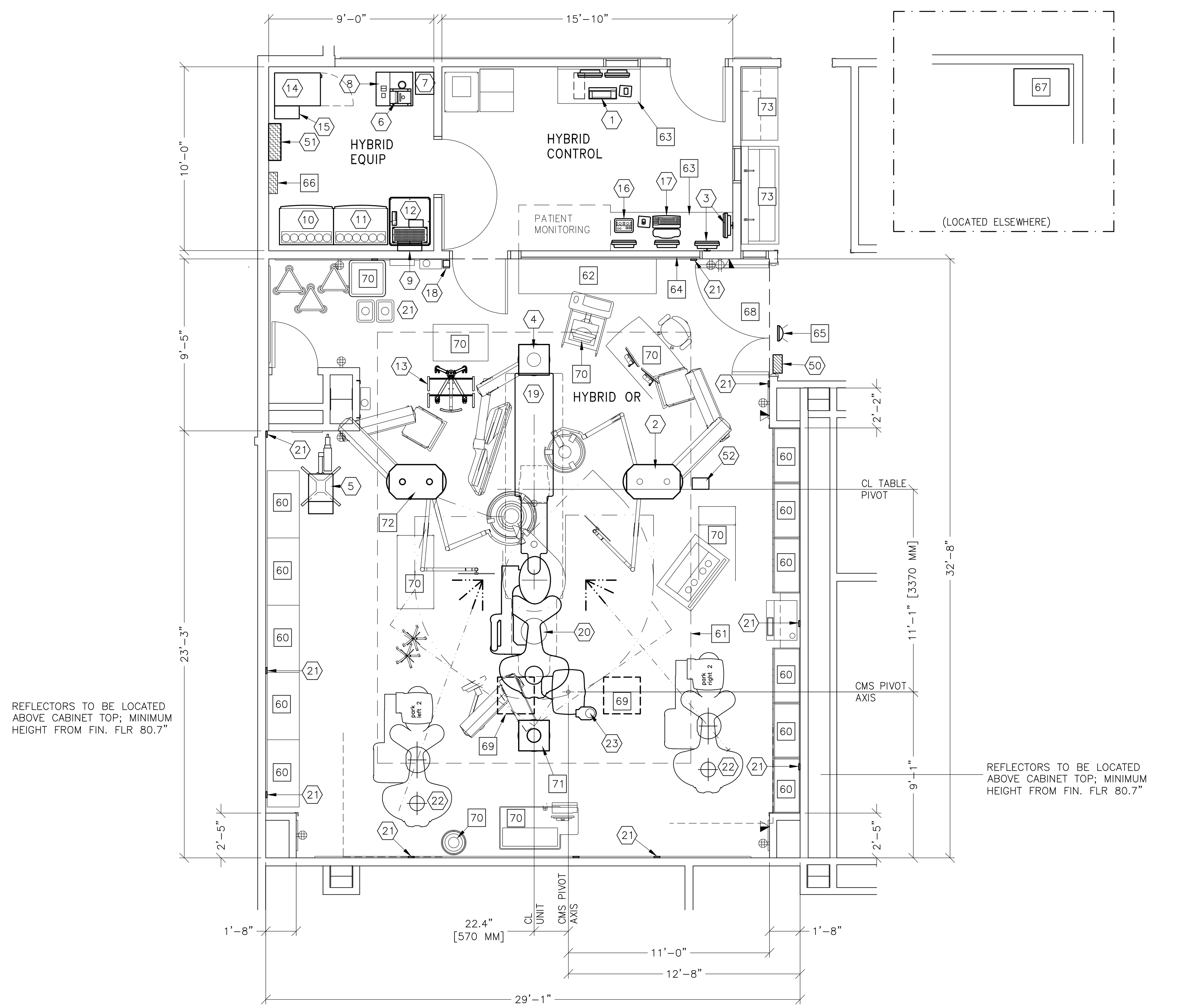
This equipment layout indicates the placement and interconnection of the indicated equipment components. There may be federal, state, and/or local requirements that could impact the placement of these components. It remains the Customer's responsibility for ensuring the site and final equipment placement complies with all applicable federal, state, and/or local requirements.

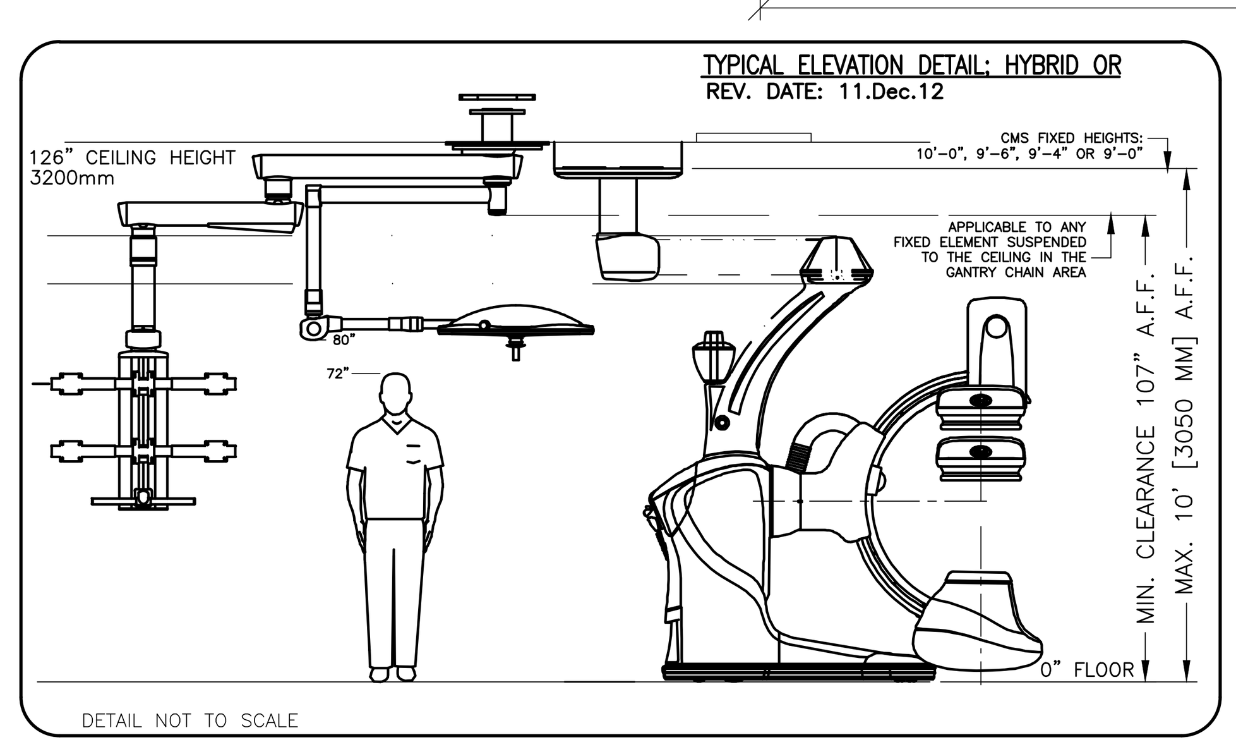
AVAILABILITY DEPENDING ON THE OPTION PURCHASED... THE FOLLOWING (✓) INDICATES PARK, BACKOUT & ARM PANNING POSITIONS POSSIBLE FOR THIS LAYOUT SHOWN IN DRAWING.

NOTE: NOT ALL PARK & BACKOUT POSITIONS ARE REQUIRED. 0–2 PARK POSITIONS CAN BE CONFIGURED ON THE MACHINE PER AVAILABLE SPACE, AND AS MANY BACK-OUT POSITIONS THE AVAILABLE SPACE ALLOWS. (20 INCH [508MM] CLEARANCE REQUIRED BETWEEN GANTRY AND OBSTRUCTIONS SUCH AS WALLS, COLUMNS, CASEWORK ECT. FOR SAFETY CONCERNS).

PARK POSITION		BACKOUT POSITION	MIN.	MAX.	ARM BACKOUT	MIN.	MAX.
PARK RIGHT 1		FOOT RIGHT	✓		LEFT INTER	✓	
PARK RIGHT 2	✓	LATERAL RIGHT	✓		RIGHT INTER	✓	✓
PARK RIGHT 3					LEFT SWIVEL	✓	✓
PARK RIGHT 4		FOOT LEFT	✓	✓	RIGHT SWIVEL	✓	✓
PARK HEAD 1		LATERAL LEFT	✓	✓	ARM PANNING		
PARK LEFT 1							
PARK LEFT 2	✓	HEAD RIGHT	✓		LEFT PANNING −35°	✓	✓
PARK LEFT 3		HEAD LEFT	✓	✓	RIGHT PANNING −35°	✓	✓
PARK LEFT 4		HEAD LONG	✓		LEFT PANNING +35°	✓	✓
					RIGHT PANNING +35°	✓	✓







SEISMIC OVERVIEW

THE CUSTOMER MUST COMPLY WITH LOCAL SEISMIC ANCHORING CODES THAT PERTAIN TO THIS SITE

SEISMIC CALCULATIONS ARE AVAILABLE UPON REQUEST THROUGH YOUR LOCAL GEHC PROJECT MANAGER FOR GEHC MANUFACTURED EQUIPMENT. THESE CALCULATIONS ARE PER CALIFORNIA BUILDING CODE (CBC) AND INTERNATIONAL BUILDING CODE (IBC).

GE Project Manager: HANK ROLUFS
Telephone: 360-887-2380
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ANCILLARY ITEMS

CUSTOMER/CONTRACTOR SUPPLIED AND INSTALLED ITEMS

ITEM NO.	ITEM DESCRIPTION (* INDICATES EXISTING)
60	CATHETER CABINETS
61	LAMINAR AIR-FLOW AREA IN CEILING
62	COUNTER TOP WITH BASE CABINETS
63	COUNTER TOP FOR EQUIPMENT-MINIMUM DEPTH 30 in. OR ADDITIONAL SHELVING MAY BE REQUIRED PROVIDE GROMMETED OPENINGS AS REQUIRED TO ROUTE INTERCONNECT CABLES TO RACEWAY BELOW COUNTERTOP.
64	CONTROL WALL TO CEILING WITH LEAD GLASS WINDOW
65	X-RAY ON WARNING LIGHT - AVAILABLE FROM GE SUPPLY CALL: 800-200-9760 GE CAT. NO. WXIABWW-OF-XIU
66	150-AMP LOCAL SERVICE DISCONNECT FOR LOCK-OUT/ TAG-OUT CAPABILITY. (MAY BE A FUSED DISCONNECT, CIRCUIT BREAKER OR SAFETY SWITCH.)
67	CUSTOMER SUPPLIED STORAGE CABINET
68	MIN. DOOR OPENING FOR GANTRY DELIVERY: 55.5" x 81.1" [1410mm x 2060mm] CONTINGENT UPON A 96" [2438mm] CORRIDOR. SEE DETAIL B-IGS14
69	CEILING SERVICE ACCESS PANEL
70	MISC. EQUIPMENT
71	VENDOR EQUIPMENT BOOM
72	VENDOR CEILING BOOM WITH LAMP/RAD SHIELD
73	SCRUB SINK AND COUNTER TOP WITH BASE/WALL CABINETS

THE FOLLOWING ITEMS ARE AVAILABLE FROM GE HEALTHCARE TECHNOLOGIES. CONTACT YOUR LOCAL GE HEALTHCARE SERVICE REPRESENTATIVE FOR PRICING AND AVAILABILITY.

GENERAL SPECIFICATIONS

- THE REQUIRED CEILING HEIGHT INDICATED ON THESE PLANS IS TO ENSURE EQUIPMENT FUNCTION IS NOT INHIBITED. CONSULT WITH YOUR LOCAL GEHC IS SPECIALIST REGARDING ACCEPTABILITY OF OTHER CEILING HEIGHTS.
- CHECK ALL DOOR OPENINGS AND HALLWAYS FROM DELIVERY LOCATION TO WHERE EQUIPMENT IS TO BE INSTALLED TO ENSURE THE ROUTE PHYSICALLY AND STRUCTURALLY WILL ACCOMODATE THE EQUIPMENT AS SHIPPED.
- RADIATION PROTECTION REQUIREMENTS ARE NOT INDICATED ON THIS PLAN. WHERE NEEDED PER NATIONAL OR LOCAL CODE THEY SHALL BE SPECIFIED BY A QUALIFIED RADIOLOGICAL PHYSICIST.
- THE DEVELOPMENT OF THE EQUIPMENT LAYOUT, ROOM DIMENSIONS, MECHANICAL AND ELECTRICAL SUGGESTIONS IS PREDICATED UPON THE BEST INFORMATION OBTAINABLE FROM THE SITE, COUPLED WITH THE CUSTOMER'S KNOWN DESIRES. ARCHITECTURAL OR ELECTRICAL CHANGES INCLUDING RELOCATION OF EQUIPMENT ILLUSTRATED ON THIS DRAWING IS ALLOWED ONLY WITH NOTIFICATION, IN WRITING, AND REVIEW BY GEHC SERVICE DEPARTMENT. EQUIPMENT OPERATION, SERVICEABILITY, AND RESTRICTING CABLE LENGTHS, ETC., MAKE THIS ESSENTIAL FOR A PROPER IS. GEHC RESERVES THE RIGHT TO MAKE ON THE JOB CHANGES BECAUSE OF CUSTOMER REQUIREMENTS AND/OR OBSTACLES IN CONSTRUCTION, ETC..
- ALL WORK TO BE IN COMPLIANCE WITH NATIONAL AND LOCAL BUILDING SAFETY CODES.
- DIMENSIONS ARE TO FINISHED SURFACES OF ROOM

SITE ENVIRONMENT SPECIFICATIONS

- TECHNICAL ROOM AMBIENT OPERATING TEMPERATURE: 55 TO 77 DEGREES (F), [13 TO 25 DEGREES C], WITH 30% – 75% HUMIDITY. THE TARGET TEMPERATURE (BEST RECOMMENDED) IS 64 DEGREES (F), [18 DEGREES (C)].
- TECHNICAL ROOM WITH FLUORO UPS AMBIENT OPERATING TEMPERATURE: 68 TO 77 DEGREES (F), [20 TO 25 DEGREES C] WITH 30% – 75% HUMIDITY.
- EXAM ROOM AMBIENT OPERATING TEMPERATURE: DESIGN FOR PATIENT/OPERATOR COMFORT, WITH 30% – 70% HUMIDITY.
- CONTROL ROOM AMBIENT OPERATING TEMPERATURE: 68 TO 77 DEGREES (F), [20 TO 25 DEGREES C]. WITH 30% – 75% HUMIDITY.
- ALTITUDE: NOT TO EXCEED 9,842 FT. [3000 M] ABOVE SEA LEVEL.
- DO NOT RESTRICT THE AIR INTAKE AT THE LOWER FRONT OR AIR EXHAUST AT THE TOP OF THE ELECTRONICS CABINETS.

MAGNETIC INTERFERENCE SPECIFICATIONS

DIGITAL FLAT PANEL MUST BE LOCATED IN AMBIENT STATIC MAGNETIC FIELDS OF LESS THAN 1 GAUSS TO GUARANTEE SPECIFIED IMAGING PERFORMANCE.

X-RAY TUBES MUST BE LOCATED IN AMBIENT STATIC MAGNETIC FIELDS OF LESS THAN 10 GAUSS TO GUARANTEE SPECIFIED PERFORMANCE.

SYSTEM ELECTRONICS MUST BE LOCATED IN AMBIENT STATIC MAGNETIC FIELDS OF LESS THAN 10 GAUSS TO GUARANTEE DATA INTEGRITY.

OPERATORS CONSOLE EQUIPMENT MUST BE LOCATED IN AMBIENT STATIC MAGNETIC FIELDS OF LESS THAN 10 GAUSS TO OBTAIN SPECIFIED GEOMETRIC LINEARITY.

This drawing is based on Sketch No.: 14146600

PIM R1

RQ – 144293

THIS SHEET IS PART OF THE DOCUMENT SET LISTED ON SHEET C1 AND SHOULD NOT BE SEPARATED

GE Healthcare
Healthcare Project Implementation – Design Center
Milwaukee, Wisconsin

SHEET TITLE: EQUIPMENT LAYOUT
MODALITY TYPE: DISCOVERY 730 (OR)

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PROJECT TITLE: V A PALO ALTO
PALO ALTO, CALIFORNIA

PROJECT	REVISION
141466	01

DATE: 19.Jun.14
DRAWN BY: TST
CHECKED BY: LLM
QT. NO: PR11C12818V1
QT. DT: 01.May.14

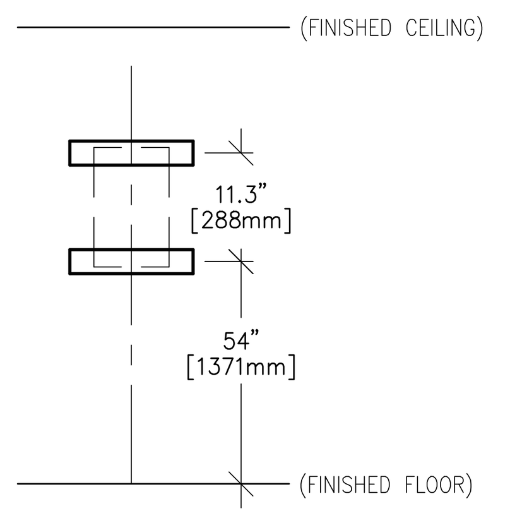
REVISION HISTORY:

SHEET A1

NFSH-1002

TYPICAL WALL SUPPORT ELEVATIONS

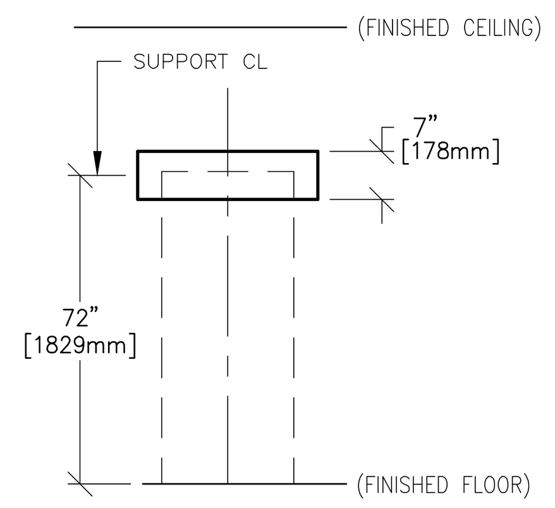
S115



SUPPORT FOR
UPS INTERFACE BOX

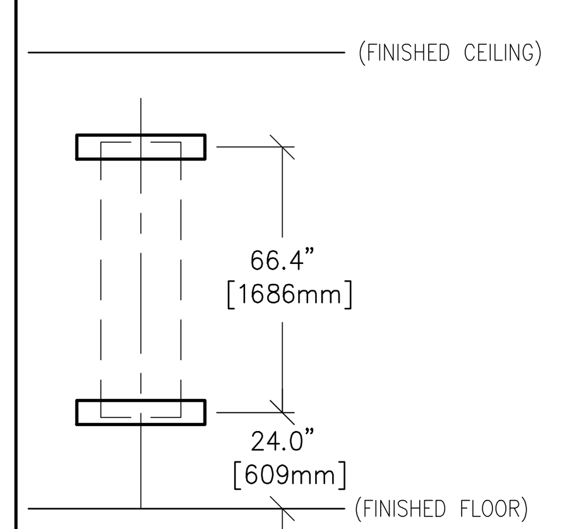
(NOT TO SCALE)

S100



SUPPORT FOR
ATLAS/SYSTEMS CABINET
(NOT TO SCALE)

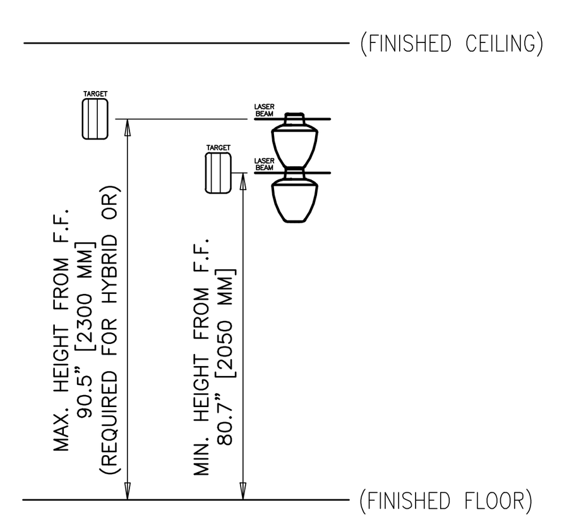
S107



SUPPORT FOR
MAIN DISCONNECT CONTROL

(NOT TO SCALE)

S132



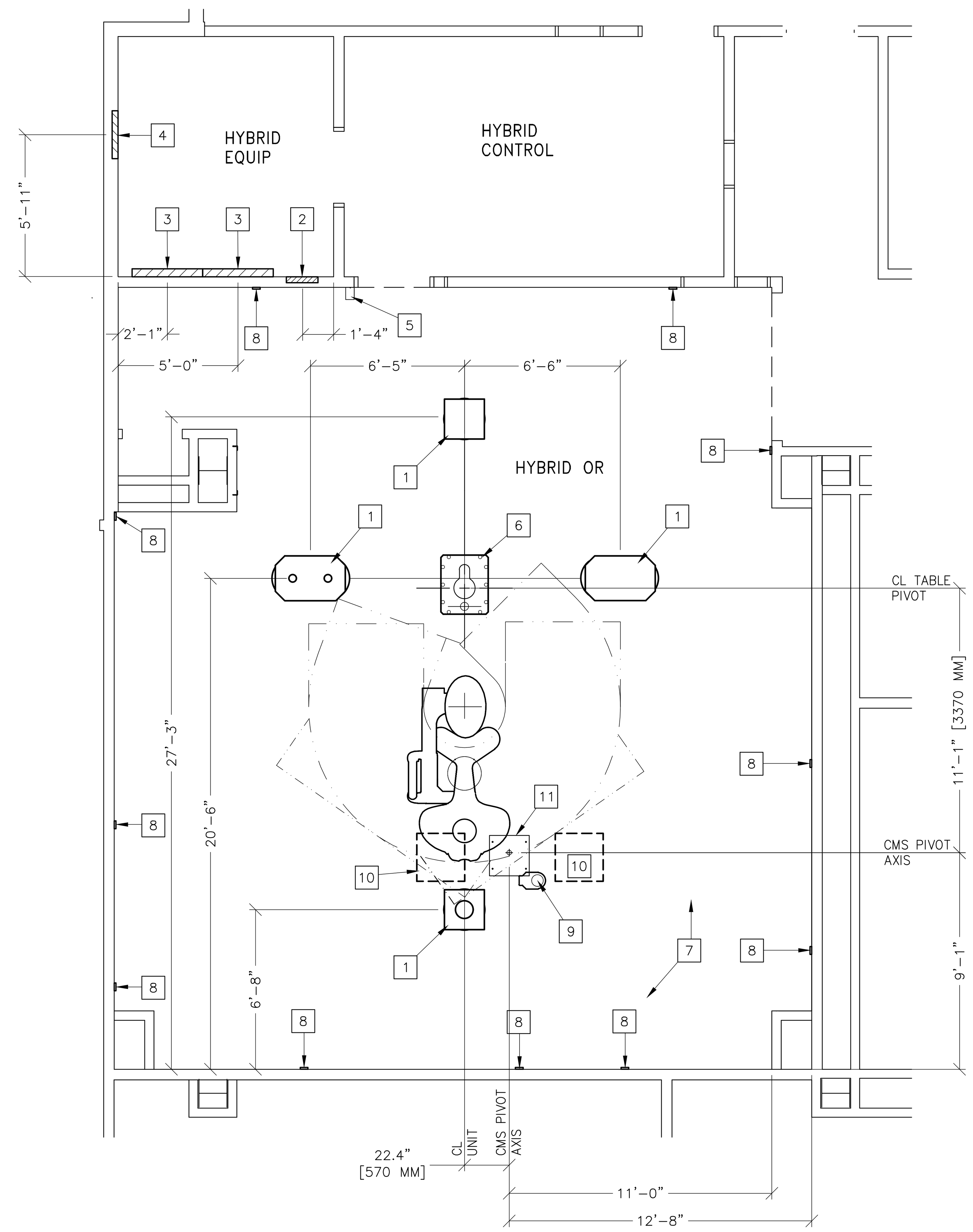
SUPPORT FOR
GANTRY NAVIGATION REFLECTORS

(NOT TO SCALE)

SCALE: 1/4" = 1'–0"

STRUCTURAL LAYOUT

CEILING HEIGHT = 10'–0"



SEISMIC OVERVIEW

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STRUCTURAL SUPPORT METHODS

CUSTOMER/CONTRACTOR SUPPLIED AND INSTALLED ITEMS

ITEM NO.	ITEM DESCRIPTION (* INDICATES EXISTING)
1	STRUCTURAL SUPPORT IN CEILING FOR VENDOR BOOM
2	SUPPORT BACKING, LOCATE AS SHOWN, REFER TO ELEVATION DETAIL S115, FOR UPS INTERFACE BOX.
3	SUPPORT BACKING, LOCATE AS SHOWN, REFER TO ELEVATION DETAIL S100, FOR ATLAS CABINET.
4	SUPPORT BACKING, LOCATE AS SHOWN, REFER TO ELEVATION DETAIL S107, FOR MAIN DISCONNECT CONTROL.
5	MOUNT XR BUZZER BRACKET ON WALL. ABOVE CEILING
6	AREA OCCUPIED BY GE SUPPLIED TABLE BASEPLATE
7	DISCOVERY IGS 730 IS NOT COMPATIBLE WITH TECHNICAL (RAISED) FLOORING. FLOORING FINISH MATERIAL IS MANDATORY PRIOR TO INSTALLATION OF THE SYSTEM. COMPATIBLE FLOOR SYSTEM FOR DISCOVERY IGS 730: "MONIPUR 7MM" MONOLITHIC FLOORING SUPPLIED BY THE RPM COMPANY (CONTACT YOUR LOCAL GE REPRESENTATIVE FOR A LIST OF RPM CERTIFIED APPLICATORS OF THE FLOORING). FLOORING CONSISTS OF 4 LAYERS: 1. PRIMER LAYER 2. BULK LAYER 3. CONDUCTIVE ADHERENCE LAYER 4. SURFACE LAYER OF PU-CEMENT THREE COMPONENTX MIX NO EXPANSION JOINT SHALL BE PRESENT IN THE CONCRETE IN THE AREA WHERE THE FLOORING SYSTEM WILL BE APPLIED FLOOR CONDUCTIVITY SHALL BE IN AGREEMENT WITH LOCAL REGULATIONS. THE RESULTING FINISHED FLOOR SURFACE SHALL ALSO MEET THE FOLLOWING SPECIFICATIONS: 1. LEVELNESS 1MM/M 2. FLATNESS 3MM/M
8	(11) REFLECTORS FOR GANTRY NAVIGATION SYSTEM. TARGETS SHOULD BE VISIBLE TO THE LASER SOURCE OF THE AGV AND THEREFORE SHOULD NOT BE MOUNTED ON MOVABLE SURFACES (DOOR, ETC). NEITHER SHOULD THEY BE MOUNTED ON A SURFACE THAT COULD BE HIDDEN IN OPERATION BY DOOR OR MOVABLE COMPONENT. REFER TO ELEVATION DETAIL S132 FOR LASER TARGET HEIGHT RANGE. FOR ADDITIONAL INFORMATION, SEE B20-084 ON SHEET S2 - TARGET HEIGHTS AND REFLECTOR SIZE THE OPTIMIZATION OF THE TARGETS PLACEMENT WILL BE DONE DURING THE SYSTEM INSTALLATION, TO MAXIMIZE THEIR VISIBILITY VS. CEILING MOUNTED COMPONENTS (BOOMS, LAMPS, ETC). THE MAXIMUM/MINIMUM TARGET HEIGHTS ARE 2300 MM (90.5 IN) - 2050 MM (80.7 IN).
9	CABLE MANAGEMENT SYSTEM (CMS). A SUPPORTING STRUCTURE IS THE RESPONSIBILITY OF CUSTOMER/CONTRACTOR. REFER TO DETAIL B20-085 AND B20-087 ON SHEET S2. THE SUPPORTING STRUCTURE (UNDER THE CUSTOMER CONTRACTOR RESPONSIBILITY) IS REQUIRED FOR THE CABLE MANAGEMENT SYSTEM (CMS)
10	CEILING SERVICE ACCESS PANEL (2 RECOMMENDED, 1 REQUIRED) MAX. 12 IN. [300MM] FROM CMS MOUNTING PLATE
11	CUSTOMER SUPPLIED PLATE 22"[559MM] X 20" [508MM] SEE DETAILS B20-085 AND B20-087 ON SHEET S2

STRUCTURAL NOTES

- ALL STEEL WORK AND PARTS NECESSARY TO SUPPORT CEILING MOUNTED TUBE HANGER OR OTHER EQUIPMENT ARE TO BE SUPPLIED BY THE CUSTOMER OR HIS CONTRACTORS. THE UNISTRUT OR EQUIVALENT STRUCTURE SHOULD RUN CONTINUOUS WITH NO FITTINGS EXTENDING BELOW FACE OF UNISTRUT CHANNEL, RUN WALL TO WALL, BE PARALLEL, SQUARE AND IN THE SAME HORIZONTAL PLANE FLUSH WITH FINISHED CEILING. THE SYSTEM IS TO BE CROSS BRACED VERTICALLY, HORIZONTALLY AND DIAGONALLY TO ALLOW NO MOVEMENT AND A MAXIMUM OF 1,58mm(1/16") DEFLECTION. **CLOSURE STRIPS SHALL BE PROVIDED FOR AREAS OF UNISTRUT EXPOSED AND WITHOUT MOUNTING UNITS.**
- METHODS OF SUPPORT FOR THE STEELWORK THAT WILL PERMIT ATTACHMENT TO STRUCTURAL STEEL OR THROUGH BOLTS IN CONCRETE CONSTRUCTION SHOULD BE FAVORED. DO NOT USE CONCRETE OR MASONRY ANCHORS IN DIRECT TENSION.
- ALL UNITS THAT ARE WALL MOUNTED OR WALL SUPPORTED ARE TO BE PROVIDED WITH SUPPORTS WHERE NECESSARY. WALL SUPPORTS ARE TO BE SUPPLIED AND INSTALLED BY THE CUSTOMER OR HIS CONTRACTORS. SEE PLAN AND DETAIL SHEETS FOR SUGGESTED LOCATIONS AND MOUNTING HOLE LOCATIONS.
- ALL CEILING MOUNTED FIXTURES, AIR VENTS, SPRINKLERS, ETC. TO BE FLUSH MOUNTED, OR SHALL NOT EXTEND MORE THAN 6,35mm (1/4") BELOW THE FINISHED CEILING.
- CONTROL WALLS WITH TUBE HANGER PASSAGE ABOVE SHALL BE CONSTRUCTED TO 2130mm (7'–0") HIGH.
- FLOOR SLABS ON WHICH EQUIPMENT IS TO BE INSTALLED MUST BE LEVEL TO 3,17mm (1/8") in 3050mm (10'–0")
- DIMENSIONS ARE TO FINISHED SURFACES OF ROOM.
- CUSTOMERS CONTRACTOR MUST PROVIDE ALL PENETRATIONS IN POST TENSION FLOORS.
- CUSTOMERS CONTRACTOR MUST PROVIDE AND INSTALL ANY NON–STANDARD ANCHORING. DOCUMENTS FOR STANDARD ANCHORING METHODS ARE INCLUDED WITH GE EQUIPMENT DRAWINGS FOR GEOGRAPHIC AREAS THAT REQUIRE SUCH DOCUMENTATION.
- CUSTOMERS CONTRACTOR MUST PROVIDE AND INSTALL HARDWARE FOR "THROUGH THE FLOOR" ANCHORING AND/OR ANY BRACING UNDER ACCESS FLOORS. THIS CONTRACTOR MUST ALSO PROVIDE FLOOR DRILLING THAT CANNOT BE COMPLETED BECAUSE OF AN OBSTRUCTION ENCOUNTERED WHILE DRILLING BY THE GE INSTALLER SUCH AS REBAR ETC.
- IT IS THE CUSTOMER'S RESPONSIBILITY TO PERFORM ANY FLOOR OR WALL PENETRATIONS THAT MAY BE REQUIRED. THE CUSTOMER IS ALSO RESPONSIBLE FOR ENSURING THAT NO SUBSURFACE UTILITIES (E.G., ELECTRICAL OR ANY OTHER FORM OF WIRING, CONDUITS, PIPING, DUCT WORK OR STRUCTURAL SUPPORTS (I.E. POST TENSION CABLES OR REBAR)) WILL INTERFERE OR COME IN CONTACT WITH SUBSURFACE PENETRATION OPERATIONS (E.G. DRILLING AND INSTALLATION OF ANCHORS/SCREWS) PERFORMED DURING THE INSTALLATION PROCESS. TO ENSURE WORKER SAFETY, GE INSTALLERS WILL PERFORM SURFACE PENETRATION OPERATIONS ONLY AFTER THE CUSTOMER'S VALIDATION AND COMPLETION OF THE "GE SURFACE PENETRATION PERMIT"

THIS SHEET IS PART OF THE DOCUMENT SET LISTED ON SHEET C1 AND SHOULD NOT BE SEPARATED

This drawing is based on Sketch No.: 14146600

PIM R1

RQ – 144293

GE Healthcare

Healthcare Project Implementation – Design Center
Milwaukee, Wisconsin

SHEET TITLE: STRUCTURAL LAYOUT

MODALITY TYPE: DISCOVERY 730 (OR)

PROJECT TITLE: V A PALO ALTO
PALO ALTO, CALIFORNIA

PROJECT	REVISION
141466	01

DATE: 19.Jun.14
DRAWN BY: TST
CHECKED BY: LLM
QT. NO: PR11C12818V1
QT. DT: 01.May.14

REVISION HISTORY:

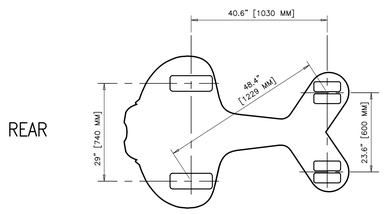
SHEET
S1

NFSH–1002

SUPPORT DETAIL
EXAM ROOM FLOOR LOAD

B20–086
REV. 00: 09.AUG.12

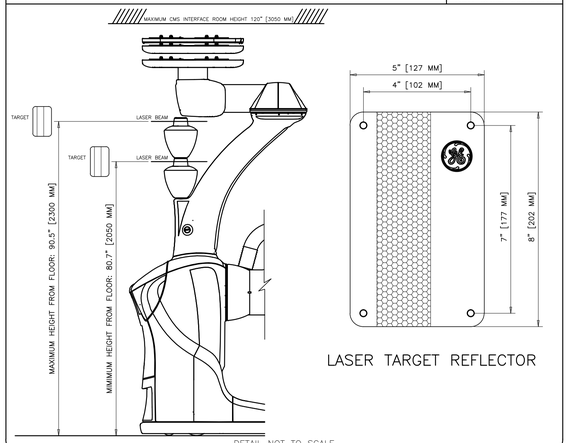
COMPONENT	WEIGHT (lb)	GROUND SURFACE	DISTRIBUTED LOAD
POSITIONER	TOTAL GANTRY WEIGHT : 2094	$1m^2$	$950kg/m^2$
	WEIGHT ON REAR WHEEL : 772	$640mm^2$	5,5MPa
	WEIGHT ON FRONT WHEEL : 243	$135mm^2$	8,1MPa
TABLE	1730 (with patient weight of 450lbs)	$0.45m^2$	



DETAIL NOT TO SCALE

EQUIPMENT DETAIL
WALL REFLECTOR – TARGET HEIGHT AND SIZE

B20–084
REV. DATE: 09.AUG.12

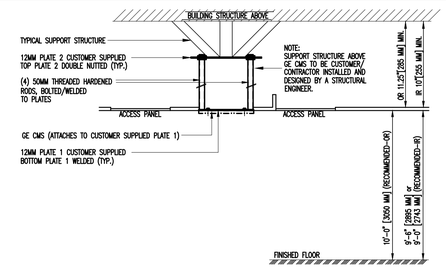


LASER TARGET REFLECTOR

DETAIL NOT TO SCALE

SUPPORT DETAIL
TYPICAL CABLE SUPPORT

B20–085
REV. DATE: 05.MAR.14

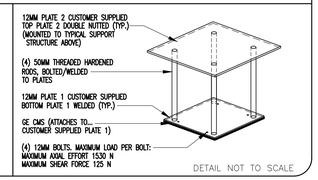


IMPORTANT NOTE:

CUSTOMER/CONTRACTOR INSTALLED AND DESIGNED BY STRUCTURAL ENGINEER.

FIRE DETECTION, LIGHTING, VENTILATION, ETC. NOT TO EXCEED FINISHED CEILING.

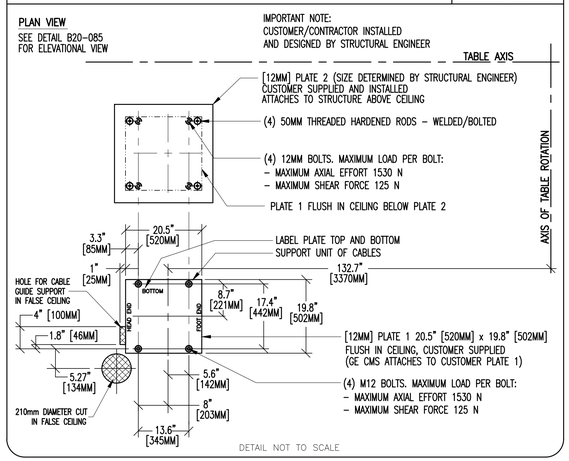
CABLE SUPPORT IS FIXED BY 12MM DIA. BOLTS. MAXIMUM LOAD PER BOLT IS 156 kg [344 lb] EACH BOLT HAS A PULL–OUT EFFORT OF 647 Kg [1426 lb].



DETAIL NOT TO SCALE

SUPPORT DETAIL
TYPICAL CABLE SUPPORT

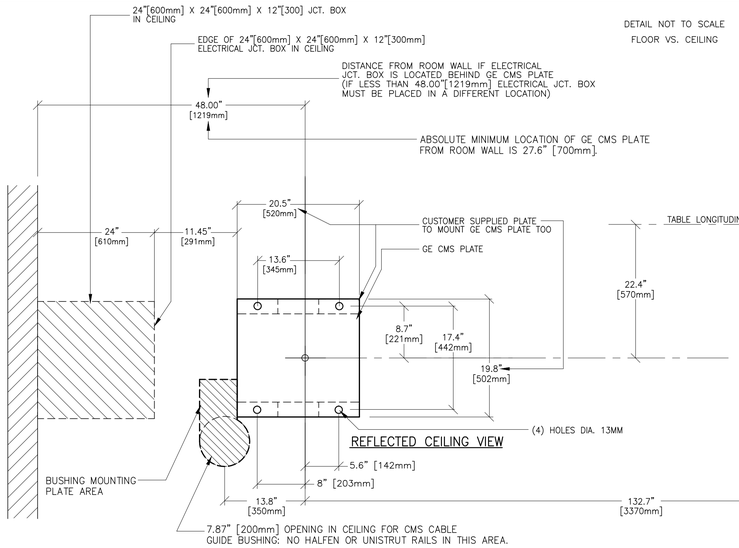
B20–087
REV. DATE: 29.APR.14



DETAIL NOT TO SCALE

DISCOVERY IGS w/IQ TILT TABLE BASEPLATE (INSTALLATION) AND REFLECTED CMS CEILING MOUNT (HYBRID OR) (TEMPLATE NO. 5447156)

B5050A
REV. DATE: 26.JUN.13



DETAIL NOT TO SCALE
FLOOR VS. CEILING

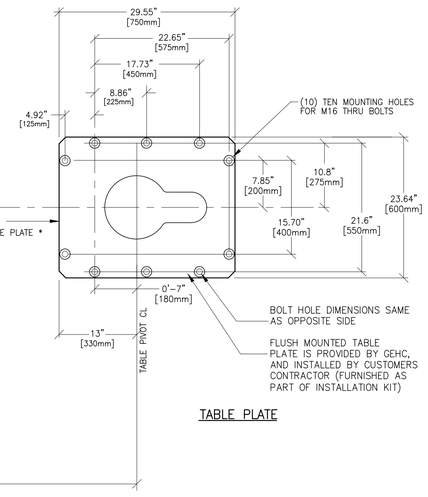
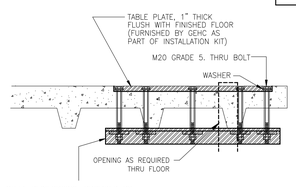
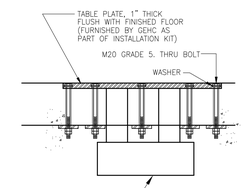


TABLE PLATE

THROUGH–BOLT MOUNTING OPTIONS

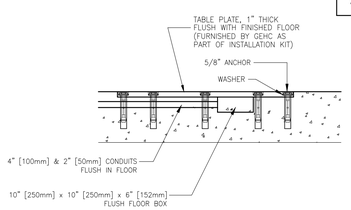


PAN CONSTRUCTION

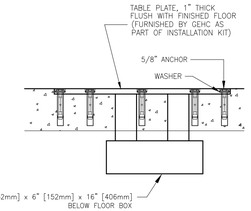


SLAB CONSTRUCTION

ANCHOR BOLT MOUNTING OPTIONS



ON GRADE CONSTRUCTION



ABOVE GRADE CONSTRUCTION

WARNING!! THE CMS FIXATION POINT IS IN A FIXED POSITION WITH RESPECT TO THE TABLE POSITION, AS SHOWN IN THE DRAWING ABOVE:

PRIOR TO DRILLING MOUNTING HOLES CONTACT LOCAL GE HEALTHCARE INSTALLATION PROJECT MANAGER OR LEAD FIELD ENGINEER TO VERIFY THAT THE PROPER FULL SIZE FLOOR MOUNTING TEMPLATE IS USED.

DETAIL NOT TO SCALE

Customer/Contractor Alert: It is the responsibility of the Customer or their Contractor to drill all anchor/thru–bolting holes for anchoring the table to the floor. Contact your local GE Project Installation Manager for the latest Preinstallation details.

* DOCUMENT FURNISHED BY GEHC AS PART OF INSTALLATION KIT

NOTE: THRU BOLTING IS HIGHLY PREFERRED FOR THE INSTALLATION OF THE TABLE.
HARDENED BOLTS AND 4" x 4" [102mm x 102mm] STEEL PLATES TO BE USED ARE SUPPLIED BY GE HEALTHCARE AS INDICATED ON THE ACTUAL DETAIL DRAWING. BE ADVISED, HOWEVER, THAT ADDITIONAL SUPPORT STRUCTURES: STEEL BEAMS, PLATES, CORE BORING OF MOUNTING HOLES, ETC., ARE TO BE SUPPLIED AND INSTALLED BY THE CUSTOMER OR THEIR CONTRACTOR.

NOTE: IF THRU BOLTING IS NOT POSSIBLE, FLOOR ANCHORS CAN BE USED IF APPROVED BY CUSTOMERS STRUCTURAL ENGINEER. FOR ON GRADE INSTALLATIONS, MOUNTING KIT CAT. NO. **2286398** BE ORDERED. ANCHORS INCLUDED IN KIT SHOULD BE APPROVED BY CUSTOMERS STRUCTURAL ENGINEER. **NOTE: BASEPLATES MUST BE LEVEL WITHIN 1/32" [0.79mm]**

NOTE: JOISTS MUST BE SPANNED WITH STEEL REINFORCING. SIZE AND THICKNESS OF STEEL DETERMINED BY THE ACTUAL PAN CONSTRUCTION ON SITE. STEEL PLATES, CHANNELS OR BEAMS MAY BE USED.

NOTE: DETERMINE THE POSITION OF THE "REBARS IN THE CONCRETE FLOOR SO ANCHOR HOLES WILL NOT RUN INTO THEM.

TILT TABLE BOLT FORCES FOR WORST CASE CONDITIONS

LOADS

BOLT TENSION
MAXIMUM TENSION = 1938 lbs. [880 Kg]/BOLT

BOLT SHEAR
MAXIMUM SHEAR = 407 lbs. [185 Kg]/BOLT

GE Healthcare
Healthcare Project Implementation – Design Center
Wisconsin
Milwaukee,

SHEET TITLE: STRUCTURAL DETAILS
MODALITY TYPE: DISCOVERY 730 (OR)

PROJECT TITLE:
V A PALO ALTO
PALO ALTO, CALIFORNIA

PROJECT	REVISION
141466	01

DATE: 19.Jun.14
DRAWN BY: TST
CHECKED BY: LLM
QT. NO: PR11C12818V1
QT. DT: 01.May.14

This drawing is based on Sketch No.: 14146600
PIM R1
RQ – 144293

REVISION HISTORY:

SHEET
S2

THIS SHEET IS PART OF THE DOCUMENT SET LISTED ON SHEET C1 AND SHOULD NOT BE SEPARATED

RQ – 144293 PIM R1 This drawing is based on Sketch No.: 14146600

SHEET S3

REVISION HISTORY:

DATE: 19.Jun.14
DRAWN BY: TST
CHECKED BY: LLM
QT. NO:PR11C1218V1
QT. DT.: 01.May.14

PROJECT 1414686 REVISION 01

PROJECT TITLE:

V A PALO ALTO

PALO ALTO, CALIFORNIA

SHEET TITLE:

MODALITY TYPE: DISCOVERY 730 (OR)

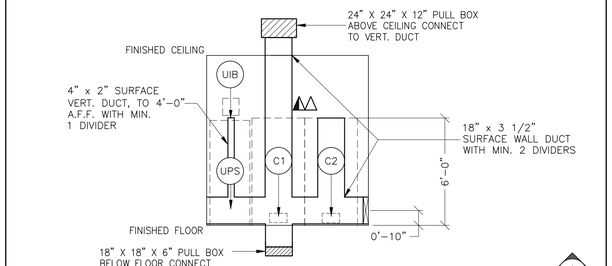
GE Healthcare

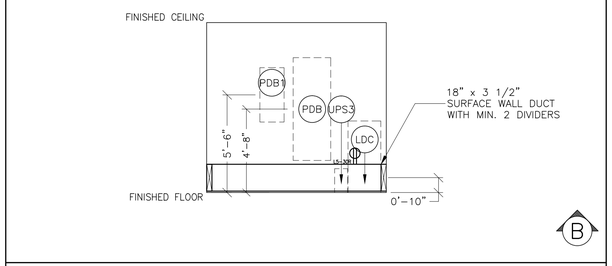
Healthcare Project Implementation – Design Center
Milwaukee, Wisconsin

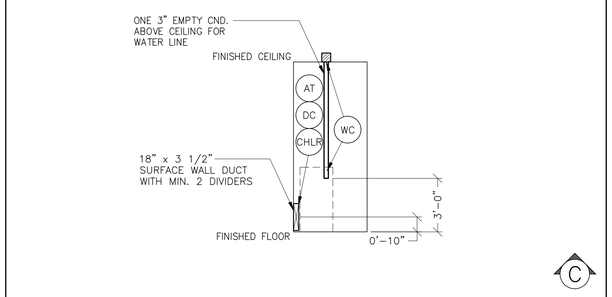
SCALE: 1/4" = 1'-0"

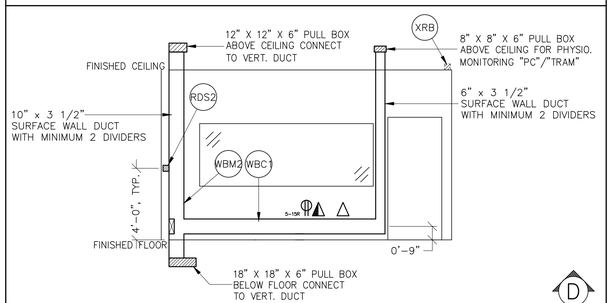
ELECTRICAL PLAN

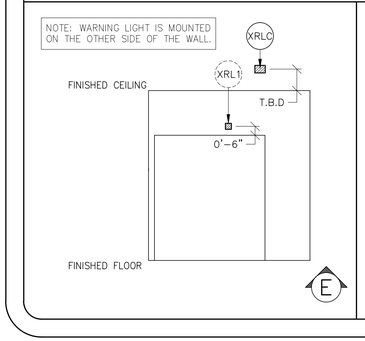
CEILING HEIGHT = 10'-0"

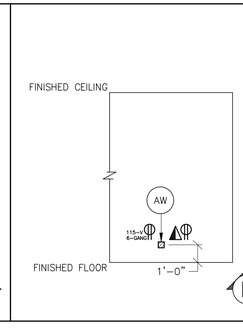












ELECTRICAL OUTLET LEGEND

CUSTOMER/CONTRACTOR SUPPLIED AND INSTALLED ITEMS. HEIGHT ABOVE FLOOR DETERMINED BY LOCAL CODES UNLESS OTHERWISE SPECIFIED.

- DUPLEX HOSPITAL GRADE, DEDICATED WALL OUTLET 120-V, SINGLE PHASE POWER
- DEDICATED TELEPHONE LINE(S) (SEE ELECTRICAL DETAIL ELEC-1 OR ELEC-67)
- NETWORK OUTLET (SEE ELECTRICAL DETAILS ELEC-83 AND ELEC-84 OR ELEC-87)
- 5-15R — 5-15R NEMA RECEPTACLE, DEDICATED OUTLET 120-V, SINGLE PHASE POWER
- DUPLEX HOSPITAL GRADE, DEDICATED OUTLET 120-V EMERGENCY, SINGLE PHASE POWER, 15A
- L5-30R — NEMA L5-30R RECEPTACLE, DEDICATED OUTLET 120-V, SINGLE PHASE POWER
- 115-V 6-GANG — 6-GANG HOSPITAL GRADE, DEDICATED WALL OUTLET 115-V, SINGLE PHASE POWER
- DUPLEX HOSPITAL GRADE, DEDICATED CEILING OUTLET 120-V, SINGLE PHASE POWER

A COMPLETE REVIEW OF ELECTRICAL OPTIONS MUST BE DISCUSSED WITH YOUR GE PROJECT MANAGER OF INSTALLATIONS, BEFORE BIDDING BEGINS.

CONDUIT RUNS: DISCOVERY IGS 730

CONDUITS REQUIRED FOR BASE SYSTEM (CONDUITS ARE LOCATED ABOVE CEILING)

REV DATE: 17.MAY.12

CMS	TO	C1/C2	FOUR 4" CNDS. (24M LENGTH) USABLE CABLE LENGTH 13M

NOTE: SEE E2 PAGE FOR MAXIMUM RUN LENGTHS

CONDUITS REQUIRED FOR BASE SYSTEM (CONDUITS ARE LOCATED BELOW FLOOR)

REV DATE: 17.MAY.12

LU5	TO	C1/C2	TWO 4" CNDS. (18M/ 24M LENGTHS - 4.8M TAKEUP) USABLE CABLE LENGTH 13.2M/ 19.2M
WBC1	TO	C1/C2	ONE 3 1/2" & TWO 2 1/2" CNDS. USABLE CABLE LENGTH UP TO 60 FT.

NOTE: SEE E2 PAGE FOR MAXIMUM RUN LENGTHS

CONDUITS REQUIRED FROM POINT "XRLC" (CONDUITS ARE LOCATED ABOVE CEILING)

REV DATE: 17.MAY.12

XRLC	TO	XRL1	ONE 1/2" CND.
XRLC	TO	C2	ONE 1/2" CND.
XRLC	TO	120-V 1Ø POWER	CND. AS REQ'D

NOTE: SEE E2 PAGE FOR MAXIMUM RUN LENGTHS

CONDUITS REQUIRED FROM POINT "WBBC" (CONDUITS ARE LOCATED BELOW FLOOR)

REV DATE: 17.MAY.12

WBBC	TO	LU5	ONE 2 1/2" CND. CABLE LENGTH 88 FT.

NOTE: SEE E2 PAGE FOR MAXIMUM RUN LENGTHS

CONDUITS REQUIRED FROM POINT "XRB" (CONDUITS ARE LOCATED ABOVE CEILING)

REV DATE: 17.MAY.12

XRB	TO	POWER STRIP IN CONTROL AREA	ONE 3/4" CND.

NOTE: SEE E2 PAGE FOR MAXIMUM RUN LENGTHS

CONDUITS REQUIRED FROM POINT "WC" (CONDUIT IS LOCATED ABOVE CEILING)

REV DATE: 17.MAY.12

WC	TO	CMS	ONE EMPTY 3" CND. (FOR WATER LINES)

NOTE: SEE E2 PAGE FOR MAXIMUM RUN LENGTHS

CONDUITS REQUIRED FROM POINT "PDB" (CONDUITS ARE LOCATED ABOVE CEILING) *CABLES THAT COULD RUN IN DUCT SYSTEM INSTEAD

REV DATE: 17.MAY.12

PDB	TO	UPS	*TWO CNDS. AS REQ'D.
PDB	TO	UIB	*ONE 1 1/2" CND. USABLE CABLE LENGTH 70 FT.
PDB	TO	RDS1	ONE 1/2" CND.
PDB	TO	RDS2	ONE 1/2" CND.
PDB	TO	C1	*TWO 2 1/2" CNDS. FOR FOUR CUSTOMER SUPPLIED POWER/ GROUND RUNS (AND GE SUPPLIED WIRES) CABLE LENGTH 19 FT.
PDB	TO	C1	*ONE 1" CND. FOR TWO GE SUPPLIED SIGNAL CABLES CABLE LENGTH 19 FT.
PDB	TO	PDB1	ONE CND. AS REQ'D.
PDB1	TO	480-V 3Ø POWER	CND. AS REQ'D
PDB	TO	IE	(INJECTOR POWER) CONSULT MFG. (RUN IN DUCT/ CONDUIT SYSTEM)

NOTE: SEE E2 PAGE FOR MAXIMUM RUN LENGTHS

CONDUITS REQUIRED FROM POINT "WBM1"/"LDM" (CONDUITS ARE LOCATED ABOVE CEILING) - LARGE DISPLAY MONITOR OPTION -

REV DATE: 23.OCT.12

WBM1	TO	C1	TWO 2 1/2" CNDS. (UP TO FOUR MONITOR SUSPENSION) USABLE CABLE LENGTH UP TO 40 FT.
LDM	TO	LDC	ONE 3" & ONE 3/4" CND. CABLE LENGTH 100 FT.
LDC	TO	WBC1	TWO 3" CNDS.
LDC	TO	TRAM	TWO 3" CNDS. (RUN TO FLOOR BOX FOR PHYSIO)

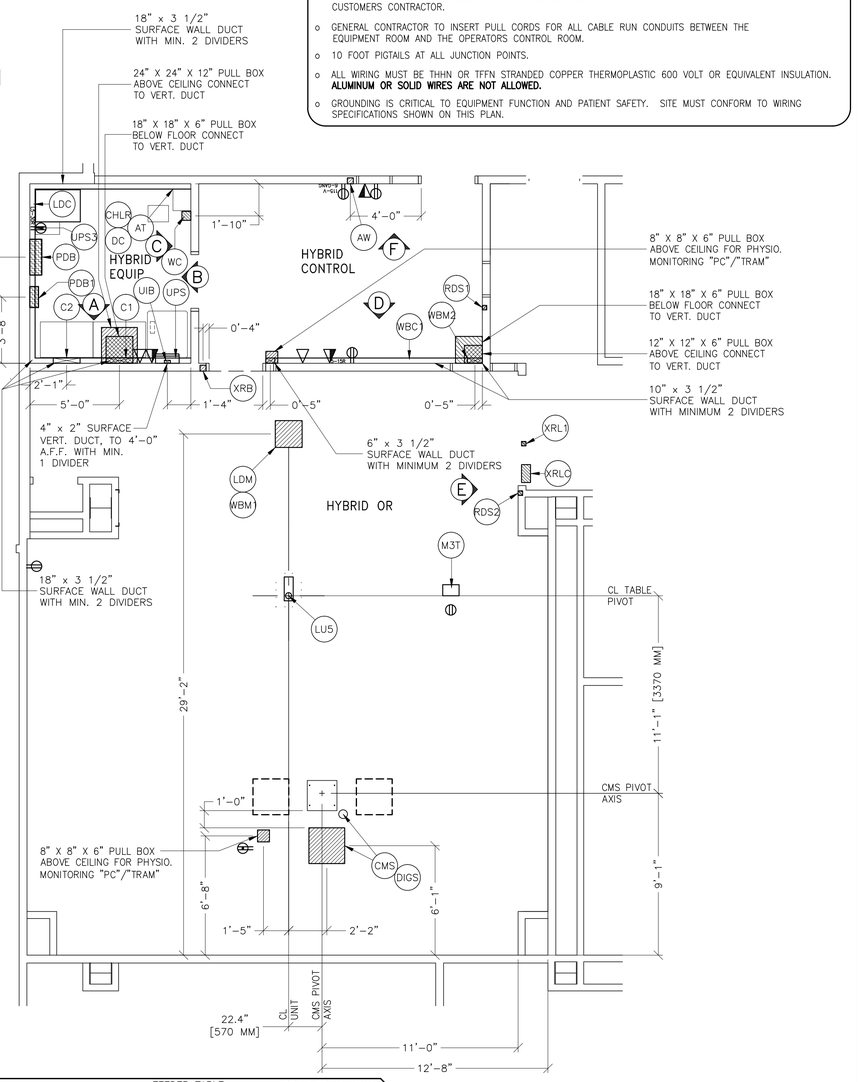
NOTE: SEE E2 PAGE FOR MAXIMUM RUN LENGTHS

CONDUIT RUNS: PHYSIO MONITORING/ IVUS

CONDUITS REQUIRED FOR GENERIC PHYSIO

REV DATE: 10/01/08

PC/IVUS	TO	WBM1	ONE 3" CND. (LOCATED ABOVE CEILING)
PC	TO	TRAM	ONE 3" CND. (LOCATED IN/BELOW FLOOR)
IVUS	TO	TRAM	ONE 3" CND. (LOCATED IN/BELOW FLOOR)



FEEDER TABLE

REV. DATE: 10.AUG.12

- CALCULATIONS BASED UPON NOMINAL VOLTAGE, WIRE SIZE IN AWG.
- RECOMMENDED FEEDER SIZES FROM DIST. SOURCE TO ROOM DISCONNECT. CALCULATIONS ARE AT NOMINAL VOLTAGE BASED UPON 1/0 WIRE SIZE FROM ROOM DISCONNECT TO POWER CABINET WITH A MAXIMUM RUN OF 25 FT.
- NEUTRAL MUST BE TERMINATED INSIDE THE MAIN DISCONNECT PANEL AND NOT AT ANY GE CABINET.
- THE GROUNDING CONDUCTOR ( ) WILL BE A 2 AWG MINIMUM, OR MEET LOCAL CODE REQUIREMENTS, WHICHEVER IS LARGER. THIS GROUND WILL RUN FROM THE EQUIPMENT BACK TO THE POWER SOURCE/MAIN GROUNDING POINT AND ALWAYS TRAVEL IN THE SAME CONDUIT WITH THE FEEDERS AND NEUTRAL.
- * MINIMUM WIRE SIZE FOR CIRCUIT BREAKER, BASED ON RECOMMENDED OVERCURRENT PROTECTION.
- FOR A FULL SYSTEM UPS, REFER TO ELECTRICAL DETAILS FOR UPS FEEDER WIRES.
- IF THE FEEDER IS BIGGER THAN 3/0, THE HOSPITAL MUST PROVIDE AND INSTALL A REDUCTION BOX.

POWER SUPPLY VOLTAGE

RUN LENGTH IN FEET	342–418 380		360–440 400		378–462 415		432–528 480	
	FEEDER	GROUND	FEEDER	GROUND	FEEDER	GROUND	FEEDER	GROUND
50	*1/0	(2)	*1/0	(2)	*1/0	(2)	*1/0	(2)
100	*1/0	(2)	*1/0	(2)	*1/0	(2)	*1/0	(2)
150	2/0	(2)	2/0	(2)	1/0	(2)	*1/0	(2)
200	4/0	(2)	3/0	(2)	3/0	(2)	1/0	(2)
250	300M	(2)	250M	(2)	4/0	(2)	3/0	(2)
300	350M	(2)	300M	(2)	300M	(2)	4/0	(2)
350	500M	(2)	400M	(2)	350M	(2)	4/0	(2)
400	600M	(2)	500M	(2)	400M	(2)	300M	(2)

JUNCTION POINT NOTES

- ALL JUNCTION BOXES, CONDUIT, DUCT, DUCT DIVIDERS, SWITCHES, CIRCUIT BREAKERS, ETC., ARE TO BE SUPPLIED AND INSTALLED BY CUSTOMERS ELECTRICAL CONTRACTOR.
- CONDUIT AND DUCT RUNS SHALL HAVE SWEEP RADIUS BENDS
- CONDUITS AND DUCT ABOVE CEILING OR BELOW FINISHED FLOOR MUST BE INSTALLED AS NEAR TO CEILING OR FLOOR AS POSSIBLE TO REDUCE RUN LENGTH.
- CEILING MOUNTED JUNCTION BOXES ILLUSTRATED ON THIS PLAN MUST BE INSTALLED FLUSH WITH FINISHED CEILING.
- ALL DUCTWORK MUST MEET THE FOLLOWING REQUIREMENTS:
  1. DUCTWORK SHALL BE METAL WITH DIVIDERS AND HAVE REMOVABLE, ACCESSIBLE COVERS.
  2. DUCTWORK SHALL BE CERTIFIED/RATED FOR ELECTRICAL POWER PURPOSES.
  3. DUCTWORK SHALL BE ELECTRICALLY AND MECHANICALLY BONDED TOGETHER IN AN APPROVED MANNER.
  4. PVC AS A SUBSTITUTE MUST BE USED IN ACCORDANCE WITH ALL LOCAL AND NATIONAL CODES.
- ALL OPENINGS IN ACCESS FLOORING ARE TO BE CUT OUT AND FINISHED OFF WITH GROMMET MATERIAL BY THE CUSTOMERS CONTRACTOR.
- GENERAL CONTRACTOR TO INSERT PULL CORDS FOR ALL CABLE RUN CONDUITS BETWEEN THE EQUIPMENT ROOM AND THE OPERATORS CONTROL ROOM.
- 10 FOOT PIGTAILS AT ALL JUNCTION POINTS.
- ALL WIRING MUST BE THHN OR TFFN STRANDED COPPER THERMOPLASTIC 600 VOLT OR EQUIVALENT INSULATION. **ALUMINUM OR SOLID WIRES ARE NOT ALLOWED.**
- GROUNDING IS CRITICAL TO EQUIPMENT FUNCTION AND PATIENT SAFETY. SITE MUST CONFORM TO WIRING SPECIFICATIONS SHOWN ON THIS PLAN.

SEISMIC OVERVIEW

THE CUSTOMER MUST COMPLY WITH LOCAL SEISMIC ANCHORING CODES THAT PERTAIN TO THIS SITE

SEISMIC CALCULATIONS ARE AVAILABLE UPON REQUEST THROUGH YOUR LOCAL GEHC PROJECT MANAGER FOR GEHC MANUFACTURED EQUIPMENT. THESE CALCULATIONS ARE PER CALIFORNIA BUILDING CODE (CBC) AND INTERNATIONAL BUILDING CODE (IBC).

CONTACT YOUR LOCAL CARDIO VASCULAR PROJECT MANAGER, INSTALLATIONS (CVPMI) FOR ANY MODIFICATIONS TO ROOM LAYOUT.

NOTE:
SUGGESTION THAT COLOR CODED PHASE CABLING BE USED EITHER BY COLORED WIRES OR COLORED TAPE.

BEFORE PROCEDING WITH INSTALLATION OF CEILING MOUNTED FIXTURES, PLEASE REFER TO STRUCTURAL SHEET S1 FOR LOCATIONS OF UNISTRUT AND OTHER STRUCTURAL SUPPORTED EQUIPMENT IN CEILING.

JUNCTION POINT DESCRIPTIONS

POINT	DESCRIPTION	QTY.	HARDWARE	DETAIL NO., SHT. E3
AT	COOLIX 4100 AUTOTRANSFORMER	1	EXTERNALLY CONNECTED TO 'CHLR' (WATER CHILLER)	
AW	ADVANTAGE WINDOWS WORKSTATION	1 1 1	COVERPLATE 4 X 4 X 4 IN BOX 1 1/2 IN. DIA. CHASE NIPPLE	ELEC-8
C1	ATLAS CABINET	1	32 IN. OF GROMMET MATERIAL FOR AN 8 X 8 IN. OPENING IN DUCT COVER	ELEC-5 ELEC-6
C2	ATLAS CABINET	1	32 IN. OF GROMMET MATERIAL FOR AN 8 X 8 IN. OPENING IN DUCT COVER	ELEC-5 ELEC-6
CHLR	COOLIX 4100 WATER CHILLER	1	12 IN. OF GROMMET MATERIAL FOR A 3 X 3 IN. OPENING IN DUCT COVER	ELEC-5 ELEC-6
CMS	CABLE MANAGEMENT SYSTEM	1 1 1	COVERPLATE 24 X 24 X 12IN. FLUSH CEILING BOX DIVIDING PARTITION	ELEC-8
DC	DETECTOR CHILLER	1	12 IN. OF GROMMET MATERIAL FOR A 3 X 3 IN. OPENING IN DUCT COVER	ELEC-5 ELEC-6
DIGS	DISCOVERY IMAGE GUIDED SYSTEM	1	EXIT POINT AT 'CMS' (CABLE MANAGEMENT SYSTEM) IN CEILING	
LDC	LARGE DISPLAY CABINET	1	12 IN. OF GROMMET MATERIAL FOR A 3 X 3 IN. OPENING IN DUCT COVER	ELEC-6 ELEC-2
LDM	LARGE DISPLAY MONITOR	1 1 1 1	COVERPLATE 3 IN. DIA. CHASE NIPPLE 18 X 18 X 6 IN. FLUSH CEILING BOX 3/4 IN. DIA CHASE NIPPLE	ELEC-8
LU5	OMEGA TABLE	1 8 1	COVERPLATE 4 IN. DIA. BUSHING & LOCKNUT 6 X 6 X 16 IN. BOX	ELEC-48 ELEC-134
M3T	MACH 3 TRANSFORMER	1	TRANSFORMER AND BOX SUPPLIED BY LAMP MANUFACTURER. (MACH 3 EXTERNAL TRANSFORMER HAS KNOCK OUT FOR DIRECT CABLE CONNECTION FROM POWER SOURCE AND AN ADDITIONAL KNOCK OUT FOR CABLE CONNECTION FROM TRANSFORMER TO SPDOLCR.)	ELEC-8
PDB	MAIN DISCONNECT	1	150-AMP PANEL INCLUDED IN ORDER	ELEC-161
PDB1	LOCAL SERVICE DISCONNECT	1	150-AMP LOCAL SERVICE DISCONNECT (CUSTOMER SUPPLIED)	
RDS1	EMERGENCY OFF	1	PROVIDE A SINGLE GANG, 2 1/8 IN. DEEP, FLUSH MTD. WALL BOX.	ELEC-16
RDS2	EMERGENCY OFF	1	PROVIDE A SINGLE GANG, 2 1/8 IN. DEEP, FLUSH MTD. WALL BOX.	ELEC-16
UIB	UPS INTERFACE BOX	1	12 IN. OF GROMMET MATERIAL FOR A 3 X 3 IN. OPENING IN DUCT COVER	ELEC-5 ELEC-6
UPS	UPS CABINET	1 1	32 IN. OF GROMMET MATERIAL FOR AN 8 X 8 IN. OPENING IN DUCT COVER 6 FT. OF 2 IN. FLEX CONDUIT AND CONNECTORS	ELEC-5 ELEC-6
UPS3	3 KVA UPS (LD SUBSYSTEM)	1	EXTERNALLY CONNECTED TO LARGE DISPLAY CABINET - 'LDC'	
WBC1	OPERATORS CONSOLE	1	12 IN. OF GROMMET MATERIAL FOR A 3 X 3 IN. OPENING IN DUCT COVER	ELEC-5 ELEC-6
WBM1	TV MONITOR	8 1	2 1/8 IN. DIA. CHASE NIPPLE SHARED CEILING BOX WITH 'LDM'	ELEC-8
WBM2	TV MONITOR	1	12 IN. OF GROMMET MATERIAL FOR A 3 X 3 IN. OPENING IN DUCT COVER	ELEC-5 ELEC-6
WC	WATER CHILLER HOSE OUTLET	1 1	6 X 6 X 6 IN. FLUSH CEILING BOX EMPTY 3 IN. CONDUIT FOR WATER LINE (SURFACE MOUNTED ON WALL)	ELEC-8
XRB	XR BUZZER (LOCATED ABOVE CEILING)	1	SINGLE GANG BOX	ELEC-8
XRL1	WARNING LIGHT	1 1 1	COVERPLATE SINGLE GANG BOX 'X-RAY ON' INCANDESCENT LIGHT FIXTURE - DO NOT USE FLUORESCENT FIXTURES.	ELEC-157
XRLC	WARNING LIGHT CONTROLLER	1	CONTROLLER - INCLUDED IN ORDER	

CONTRACTOR SUPPLIED AND INSTALLED WIRING

ELECTRICAL CONTRACTOR SHALL RING OUT AND TAG ALL WIRES AT BOTH ENDS.

WIRE RUN, FROM – TO	QUANTITY, WIRE SIZE/COLOR
3 PHASE > PDB1	3-BLACK, 1-WHITE, 1-GREEN (REFER TO FEEDER TABLE)
PDB1 > PDB	3-BLACK, 1-WHITE, 1-GREEN (REFER TO FEEDER TABLE)
PDB > C1 (JEDI)	3-1/0 BLACK, 1-1/0 GREEN
PDB > C1 (PDU)	2-NO. 10 BLACK, 1-NO. 10 GREEN
PDB > C2	3-NO. 8 BLACK, 1-NO. 8 GREEN
PDB > CHLR	3-NO. 10 BLACK, 1-NO. 10 GREEN
PDB > UPS	6-NO. 6 BLACK, 1-NO. 6 WHITE, 2-NO. 6 GREEN
PDB > RDS1	2-NO. 14 BLACK, 2-NO. 14 WHITE, 1-NO. 14 GREEN
PDB > RDS2	2-NO. 14 BLACK, 2-NO. 14 WHITE, 1-NO. 14 GREEN
XRLC > 1 PHASE	1-NO. 14 BLACK, 1-NO. 14 WHITE, 1-NO. 14 GREEN
XRLC > C2	2-NO. 14 BLACK, 2-NO. 14 WHITE, 1-NO. 14 GREEN
XRL1 > XRLC	1-NO. 14 BLACK, 1-NO. 14 WHITE, 1-NO. 14 GREEN
LDC > HOSPITAL GROUND	1-NO. 10 GREEN

GE Project Manager: HANK ROLUFS
Telephone: 360-887-2380

THE GE HPI TECHNICAL SUPPORT GROUP IS AN ADDITIONAL RESOURCE THAT CAN PROVIDE ANSWERS FOR GENERAL GE PRODUCT SITING QUESTIONS AND CAN BE REACHED AT (877)-305-9677

GE Healthcare
Healthcare Project Implementation – Design Center
Wisconsin
Milwaukee,

SHEET TITLE: ELECTRICAL LAYOUT

MODALITY TYPE: DISCOVERY 730 (OR)

PROJECT TITLE:
V A PALO ALTO
PALO ALTO, CALIFORNIA

This drawing is based on Sketch No.: 14146600

PROJECT	REVISION
141466	01

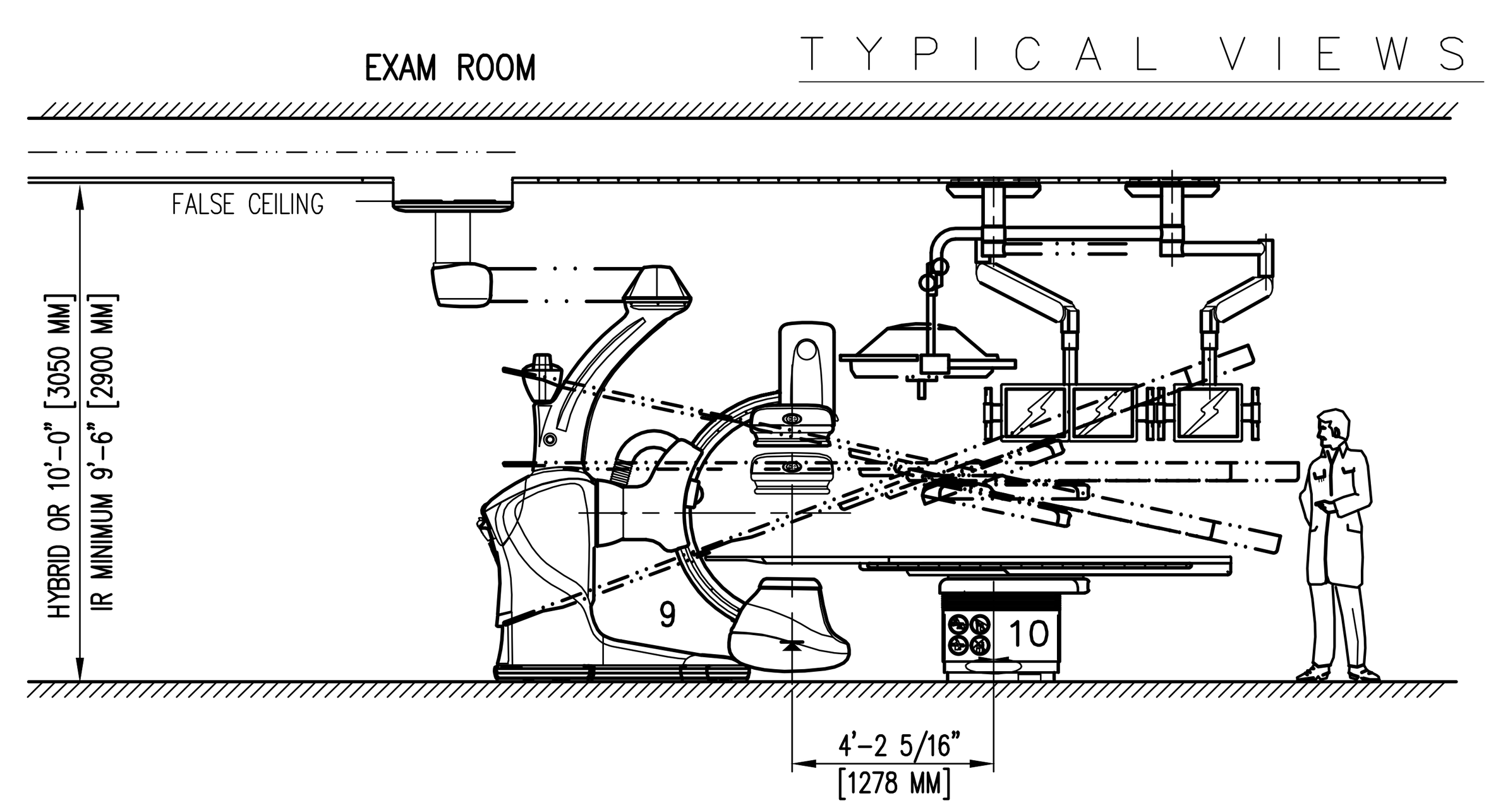
DATE: 19.Jun.14
DRAWN BY: TST
CHECKED BY: LLM
QT. NO: PR11C12818V1
QT. DT: 01.May.14

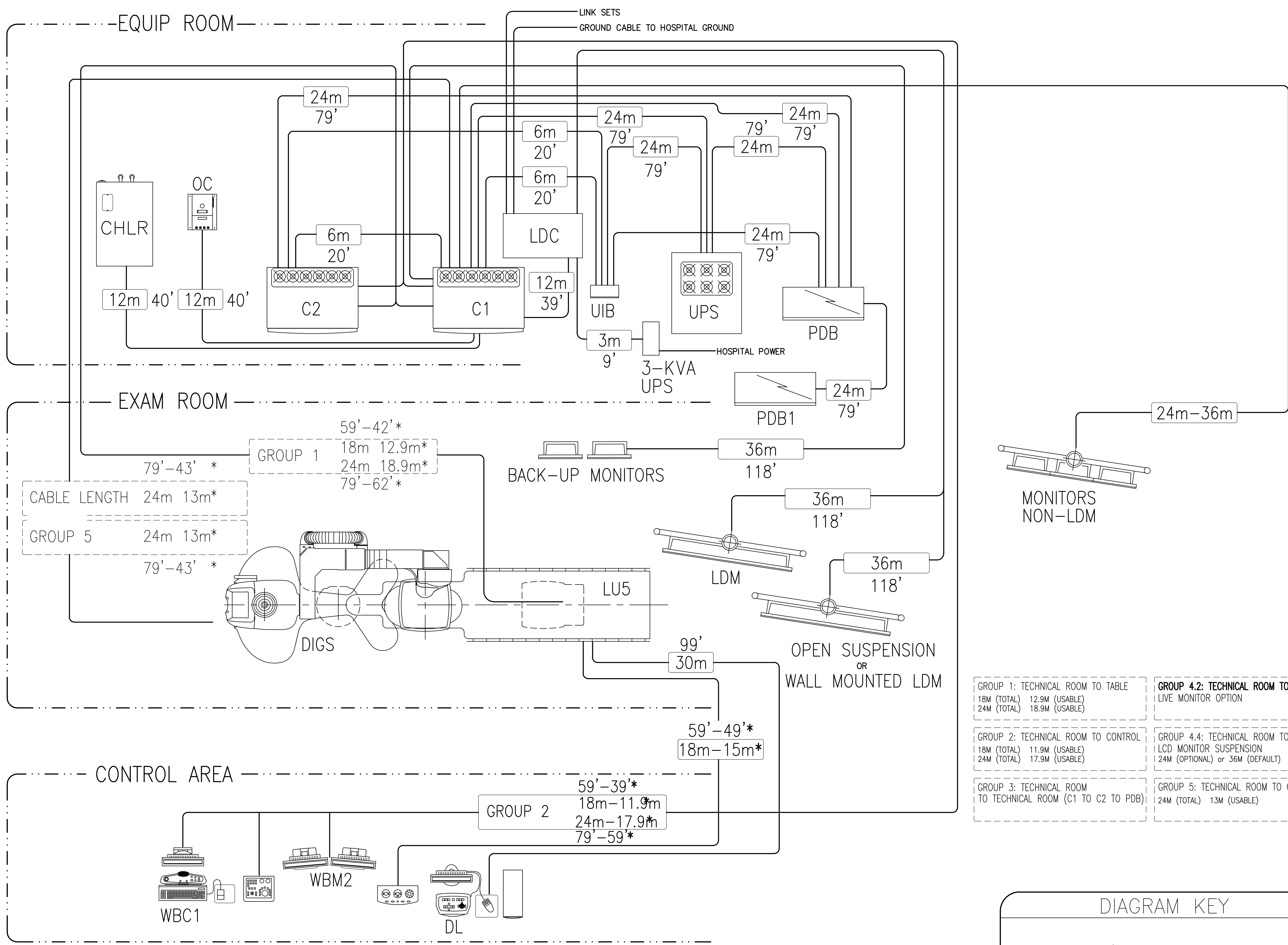
PIM R1
RQ – 144293

REVISION HISTORY:

SHEET
E1

INTERCONNECT DIAGRAM





GROUP 1: TECHNICAL ROOM TO TABLE 18M (TOTAL) 12.9M (USABLE) 24M (TOTAL) 18.9M (USABLE)	**GROUP 4.2: TECHNICAL ROOM TO** LIVE MONITOR OPTION
GROUP 2: TECHNICAL ROOM TO CONTROL 18M (TOTAL) 11.9M (USABLE) 24M (TOTAL) 17.9M (USABLE)	GROUP 4.4: TECHNICAL ROOM TO LCD MONITOR SUSPENSION 24M (OPTIONAL) or 36M (DEFAULT)
GROUP 3: TECHNICAL ROOM TO TECHNICAL ROOM (C1 TO C2 TO PDB)	GROUP 5: TECHNICAL ROOM TO CMS/AGV 24M (TOTAL) 13M (USABLE)

[........m] – TOTAL LENGTH OF CABLE

[........m*] – USABLE LENGTH OF CABLE

DIAGRAM KEY

----- CUSTOMER/CONTRACTOR SUPPLIED WIRING. ROUTE IN ADEQUATE CONDUIT OR RACEWAY.

——— GE FURNISHED CABLE RUNS. ROUTE IN EMPTY CONDUIT OR RACEWAY.

REV DATE: 28.Jun.13

POWER SPECIFICATIONS

DISCOVERY IGS SYSTEM

REV. DATE: 10.AUG.12

VOLTAGE

PRIMARY SOURCE IS REQUIRED FOR ALL INSTALLATIONS.
RANGE OF LINE VOLTAGES :
NOMINAL LINE VOLTAGE OF 380 TO 480, 3 PHASE, 50 OR 60 Hz

REQUIRED POWER SUPPLY: WYE DISTRIBUTION

MAXIMUM DAILY VOLTAGE VARIATION MUST FALL WITHIN ONE OF THE RANGES IN TABLE A.

TABLE A ALLOWABLE VOLTAGES/ CURRENT DEMAND

NOMINAL VOLTAGE	NORMAL RANGE ±10 PERCENT	CURRENT (AMPS)	
		MAX. MOMENTARY	CONTINUOUS
380	342–418	260	30
400	360–440	247	29
415	374–456	238	28
480	432–528	206	24

ALL CALCULATIONS BASED UPON NOMINAL VOLTAGE

LOW LINE CONDITIONS MAY INHIBIT SOME HIGH kVp TECHNIQUES. THE GENERATOR AUTOMATICALLY ESTABLISHES THESE INHIBITS BASED ON ACTUAL LINE CONDITIONS AND SYSTEM REGULATION.

PHASE–BALANCE.

PHASE–TO–PHASE VOLTAGES MUST BE WITHIN +2 PERCENT OF THE LOWEST PHASE–TO–PHASE VOLTAGE. MAXIMUM ALLOWABLE TRANSIENT VOLTAGE EXCURSIONS ARE 2.5 PERCENT OF RATED LINE VOLTAGE AT A MAXIMUM DURATION OF 5 CYCLES AND FREQUENCY OF 10 TIMES PER HOUR.

DEMAND

CONTINUOUS POWER DEMAND = 20KVA. (MAX DEMAND = 171 KVA)

TABLE B MAXIMUM MOMENTARY DEMAND.

DEMAND	GENERATOR SYSTEM
kVa *	171
POWER FACTOR AT	0.9
mA	1250
kVp	80

* DEMAND INCLUDES POWER FOR ENTIRE GENERATOR SYSTEM. LINE VOLTAGE REGULATION AT MAXIMUM POWER DEMAND MUST BE LESS THAN OR EQUAL TO 6 PERCENT.

DISTRI– TRANS– FORMER

FOR A SINGLE UNIT INSTALLATION, THE MINIMUM TRANSFORMER SIZE IS 225 KVA.

ELECTRICAL NOTES

NOTE 1: ALL WIRES SPECIFIED SHALL BE COPPER STRANDED, FLEXIBLE, THERMO–PLASTIC, COLOR CODED, CUT 10 FOOT LONG AT OUTLET BOXES, DUCT TERMINATION POINTS OR STUBBED CONDUIT ENDS. ALL CONDUCTORS, POWER, SIGNAL AND GROUND, MUST BE RUN IN A CONDUIT OR DUCT SYSTEM. ELECTRICAL CONTRACTOR SHALL RING OUT AND TAG ALL WIRES AT BOTH ENDS. WIRE RUNS MUST BE CONTINUOUS COPPER STRANDED AND FREE FROM SPLICES. **ALUMINUM OR SOLID WIRES ARE NOT ALLOWED.**

NOTE 2: WIRE SIZES GIVEN ARE FOR USE OF EQUIPMENT. LARGER SIZES MAY BE REQUIRED BY LOCAL CODES.

NOTE 3: IT IS RECOMMENDED THAT ALL WIRES BE COLOR CODED, AS REQUIRED IN ACCORDANCE WITH NATIONAL AND LOCAL ELECTRICAL CODES.

NOTE 4: CONDUIT SIZES SHALL BE VERIFIED BY THE ARCHITECT, ELECTRICAL ENGINEER OR CONTRACTOR, IN ACCORDANCE WITH LOCAL OR NATIONAL CODES.

NOTE 5: CONVENIENCE OUTLETS ARE NOT ILLUSTRATED. THEIR NUMBER AND LOCATION ARE TO BE SPECIFIED BY OTHERS. LOCATE AT LEAST ONE CONVENIENCE OUTLET CLOSE TO THE SYSTEM CONTROL, THE POWER DISTRITBUTION UNIT AND ONE ON EACH WALL OF THE PROCEDURE ROOM. USE HOSPITAL APPROVED OUTLET OR EQUIVALENT.

NOTE 6: GENERAL ROOM ILLUMINATION IS NOT ILLUSTRATED. CAUTION SHOULD BE TAKEN TO AVOID EXCESSIVE HEAT FROM OVERHEAD SPOTLIGHTS. DAMAGE CAN OCCUR TO CEILING MOUNTING COMPONENTS AND WIRING IF HIGH WATTAGE BULBS ARE USED. RECOMMEND LOW WATTAGE BULBS NO HIGHER THAN 75 WATTS AND USE DIMMER CONTROLS (EXCEPT MR). DO NOT MOUNT LIGHTS DIRECTLY ABOVE AREAS WHERE CEILING MOUNTED ACCESSORIES WILL BE PARKED.

NOTE 7: ROUTING OF CABLE DUCTWORK, CONDUITS, ETC., MUST RUN DIRECT AS POSSIBLE OTHERWISE MAY RESULT IN THE NEED FOR GREATER THAN STANDARD CABLE LENGTHS (REFER TO THE INTERCONNECTION DIAGRAM FOR MAXIMUM USABLE LENGTHS POINT TO POINT).

NOTE 8: CONDUIT TURNS TO HAVE LARGE, SWEEPING BENDS WITH MINIMUM RADIUS IN ACCORDANCE WITH NATIONAL AND LOCAL ELECTRICAL CODES.

NOTE 9: A SPECIAL GROUNDING SYSTEM IS REQUIRED IN ALL PROCEDURE ROOMS BY SOME NATIONAL AND LOCAL CODES. IT IS RECOMMENDED IN AREAS WHERE PATIENTS MIGHT BE EXAMINED OR TREATED UNDER PRESENT, FUTURE, OR EMERGENCY CONDITIONS. CONSULT THE GOVERNING ELECTRICAL CODE AND CONFER WITH APPROPRIATE CUSTOMER ADMINISTRATIVE PERSONNEL TO DETERMINE THE AREAS REQUIRING THIS TYPE OF GROUNDING SYSTEM.

NOTE 10: THE MAXIMUM POINT TO POINT DISTANCES ILLUSTRATED ON THIS DRAWING MUST NOT BE EXCEEDED.

NOTE 11: PHYSICAL CONNECTION OF PRIMARY POWER TO GE EQUIPMENT IS TO BE MADE BY CUSTOMERS ELECTRICAL CONTRACTOR WITH THE SUPERVISION OF A GE REPRESENTATIVE. THE GE REPRESENTATIVE WOULD BE REQUIRED TO IDENTIFY THE PHYSICAL CONNECTION LOCATION, AND INSURE PROPER HANDLING OF GE EQUIPMENT.

NOTE 12: GEHC CONDUCTS POWER AUDITS TO VERIFY QUALITY OF POWER BEING DELIVERED TO THE SYSTEM. THE CUSTOMER'S ELECTRICAL CONTRACTOR IS REQUIRED TO BE AVAILABLE TO SUPPORT THIS ACTIVITY.

This drawing is based on Sketch No.: 14146600

RQ – 144293 PIM R1

GE Healthcare

Healthcare Project Implementation – Design Center
Milwaukee, Wisconsin

SHEET TITLE: ELECTRICAL SPECIFICATIONS

MODALITY TYPE: DISCOVERY 730 (OR)

PROJECT TITLE: V A PALO ALTO

PALO ALTO, CALIFORNIA

PROJECT	REVISION
141466	01

DATE: 19.Jun.14
DRAWN BY: TST
CHECKED BY: LLM
QT. NO: PR11C12818V1
QT. DT: 01.May.14

REVISION HISTORY:

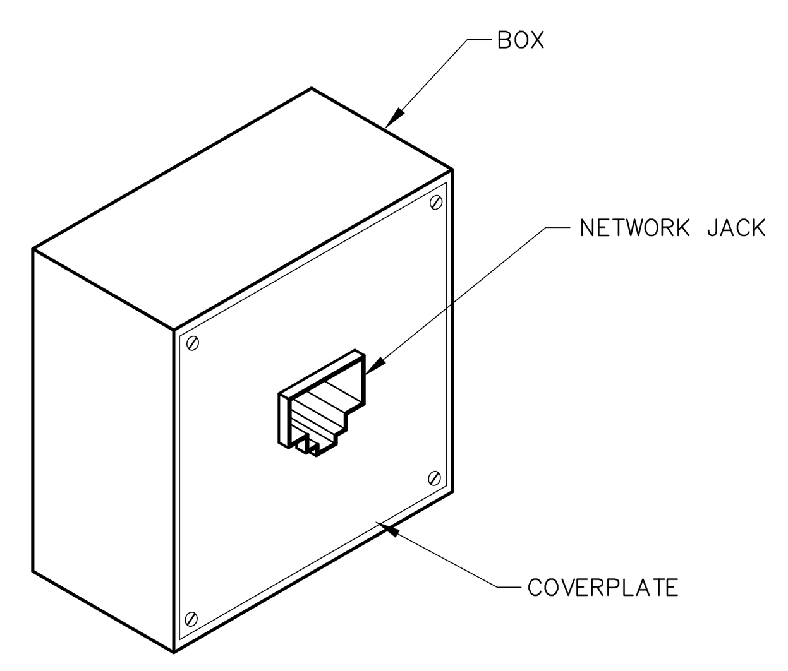
SHEET E2

NFSH-1002

ELECTRICAL DETAIL
BOX WITH COVERPLATE AND NETWORK JACK

ELEC-83

REV. DATE: 10/06/98

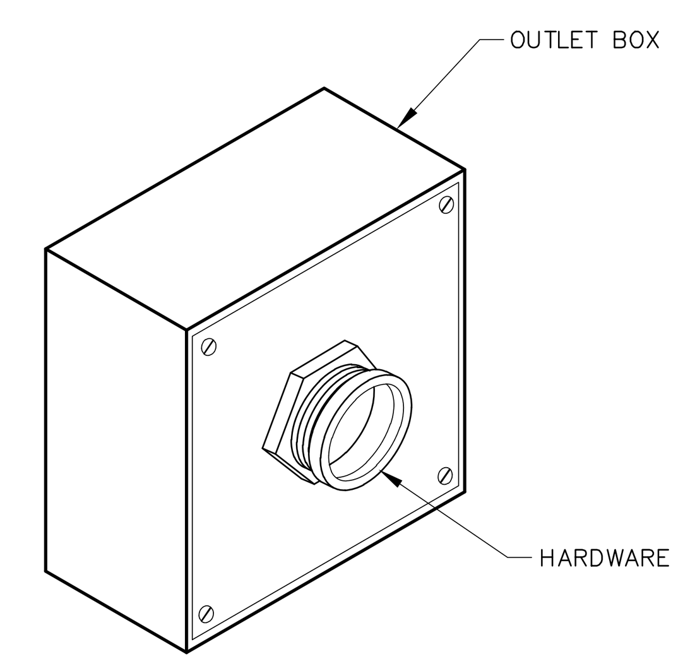


DETAIL NOT TO SCALE

ELECTRICAL DETAIL
BOX WITH COVERPLATE (TYPICAL)

ELEC-8

REV. DATE: 09/30/94

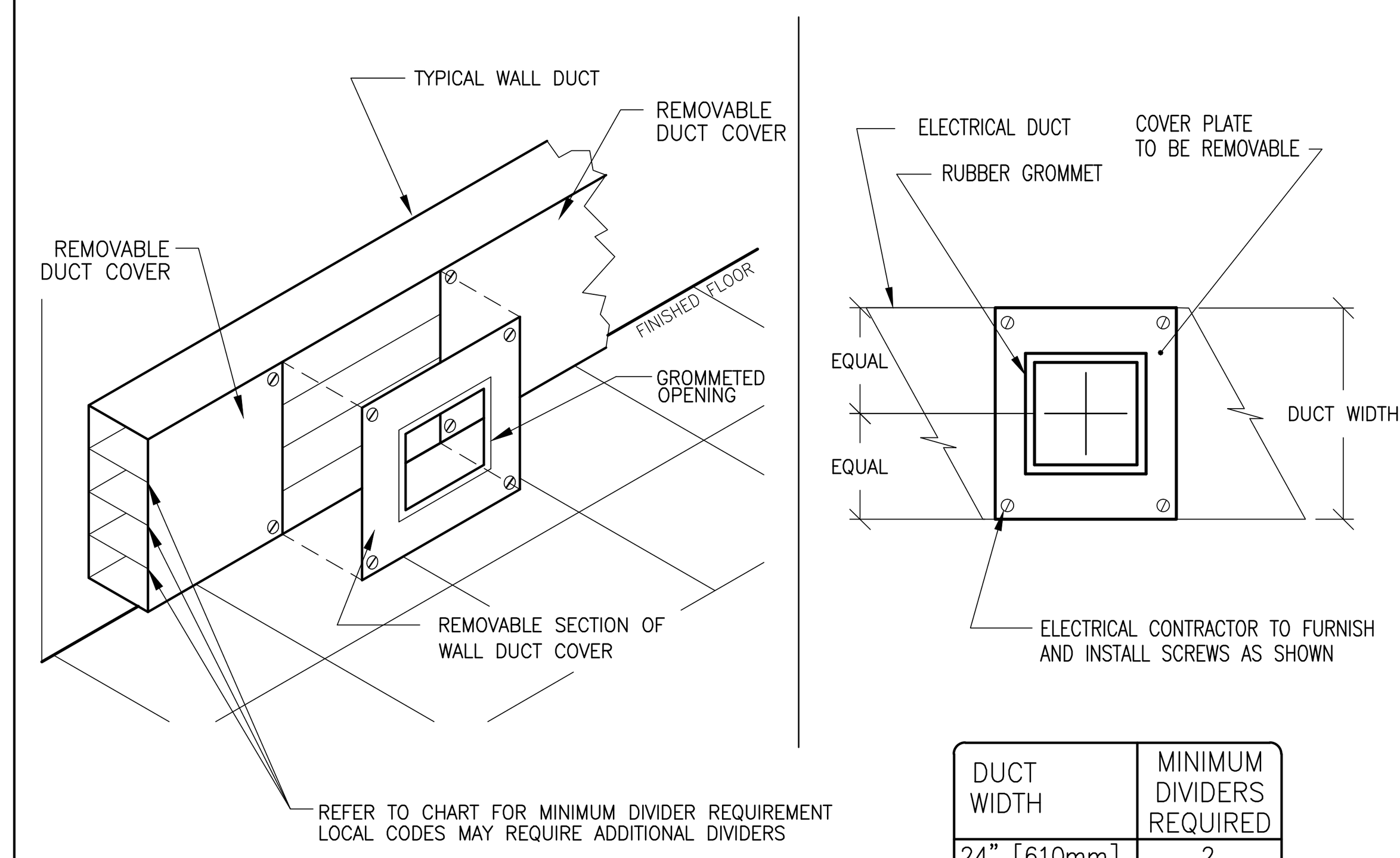


DETAIL NOT TO SCALE

ELECTRICAL DETAIL
HORIZONTAL WALL DUCT (TYPICAL)

ELEC-5

REV. DATE: 03/19/04



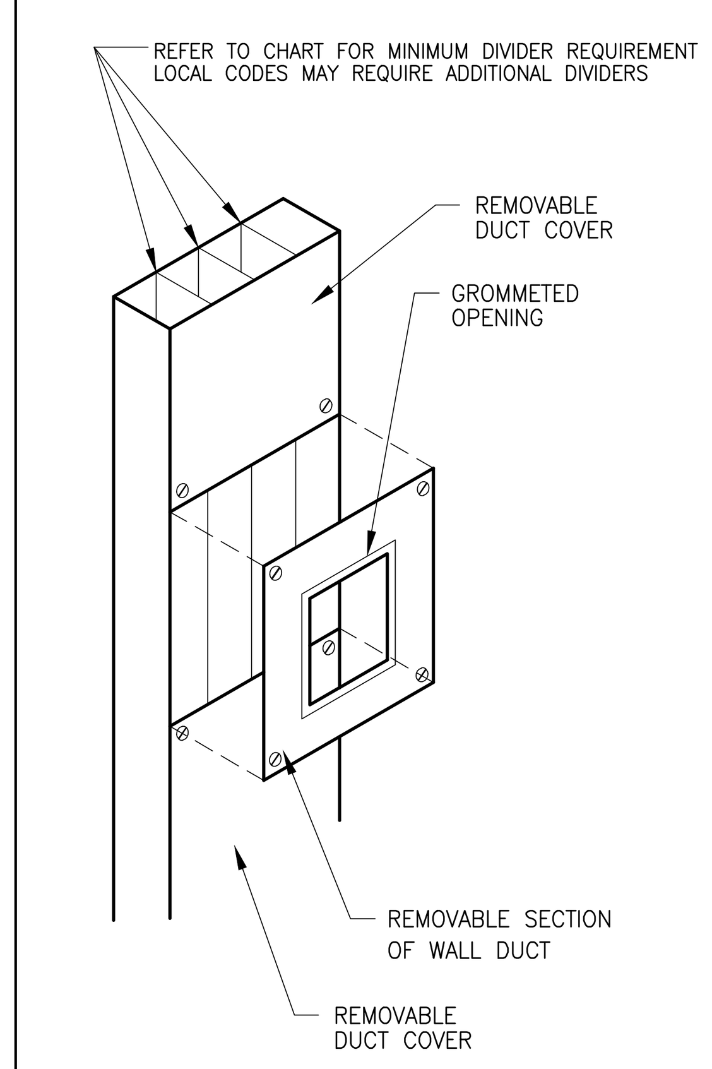
DUCT WIDTH	MINIMUM DIVIDERS REQUIRED
24" [610mm]	2
18" [457mm]	2
10" [254mm]	2
6" [152mm]	1
4" [102mm]	1

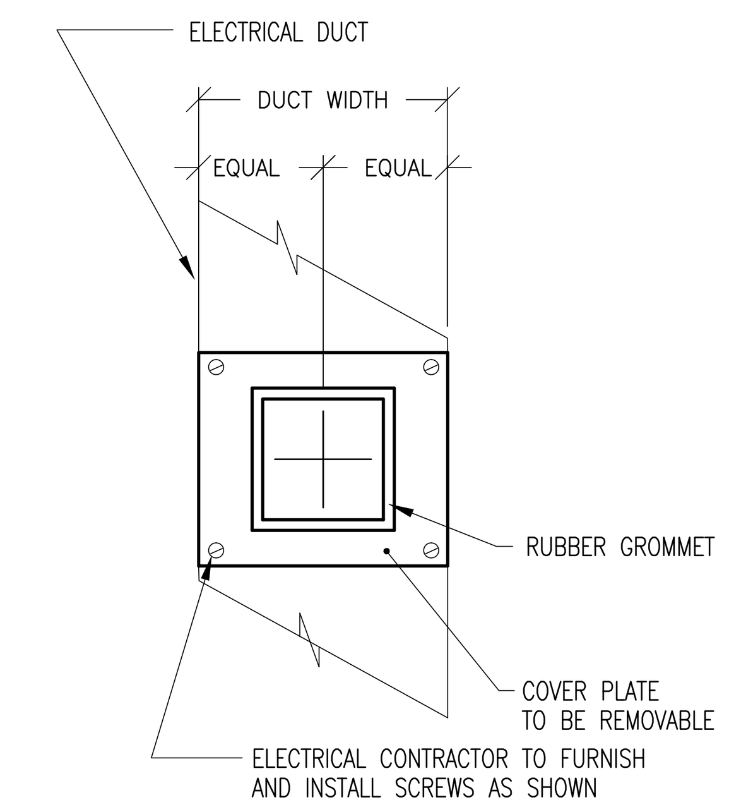
DETAIL NOT TO SCALE

ELECTRICAL DETAIL
VERTICAL WALL DUCT (TYPICAL)

ELEC-6

REV. DATE: 03/19/04





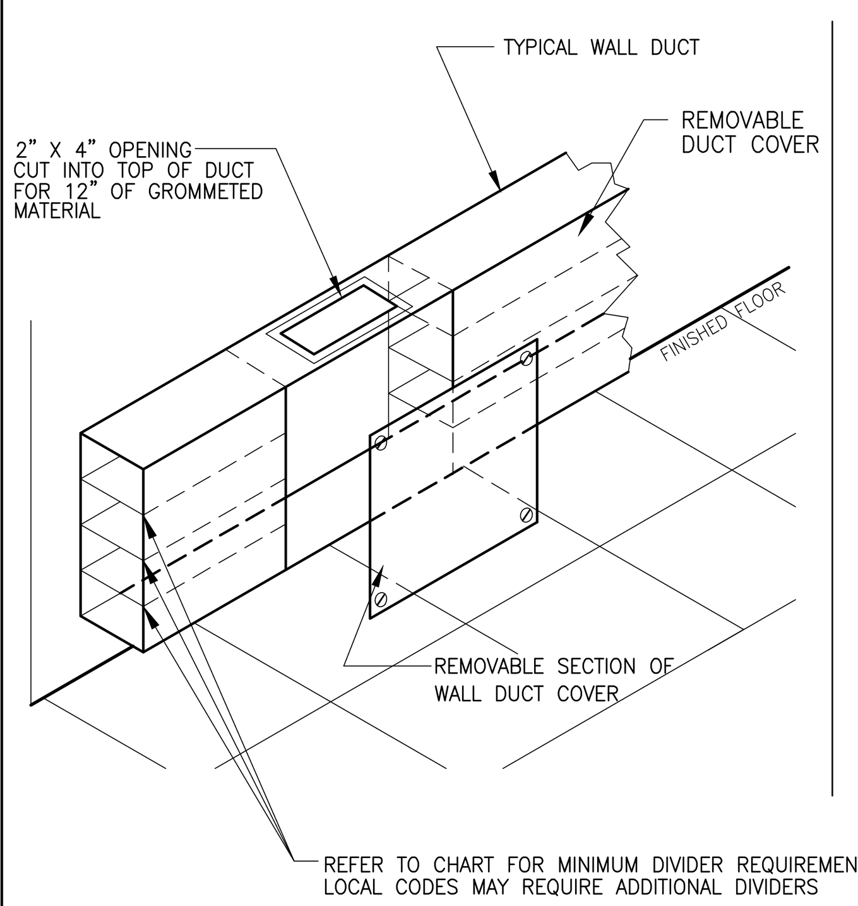
DUCT WIDTH	MINIMUM DIVIDERS REQUIRED
24" [610mm]	2
18" [457mm]	2
10" [254mm]	2
6" [152mm]	1
4" [102mm]	1

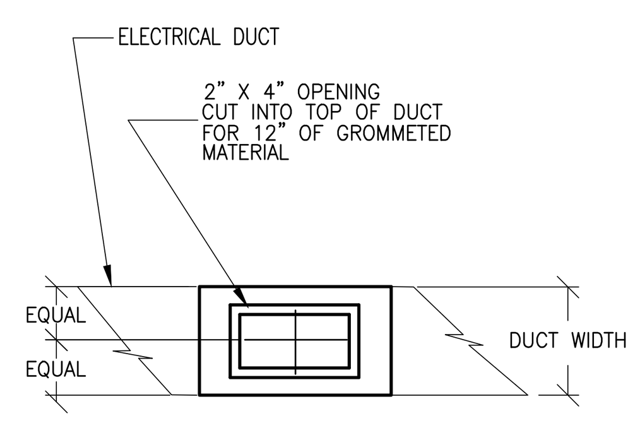
DETAIL NOT TO SCALE

ELECTRICAL DETAIL
HORIZONTAL WALL DUCT (TYPICAL)

ELEC-5A

REV. DATE: 06/16/08





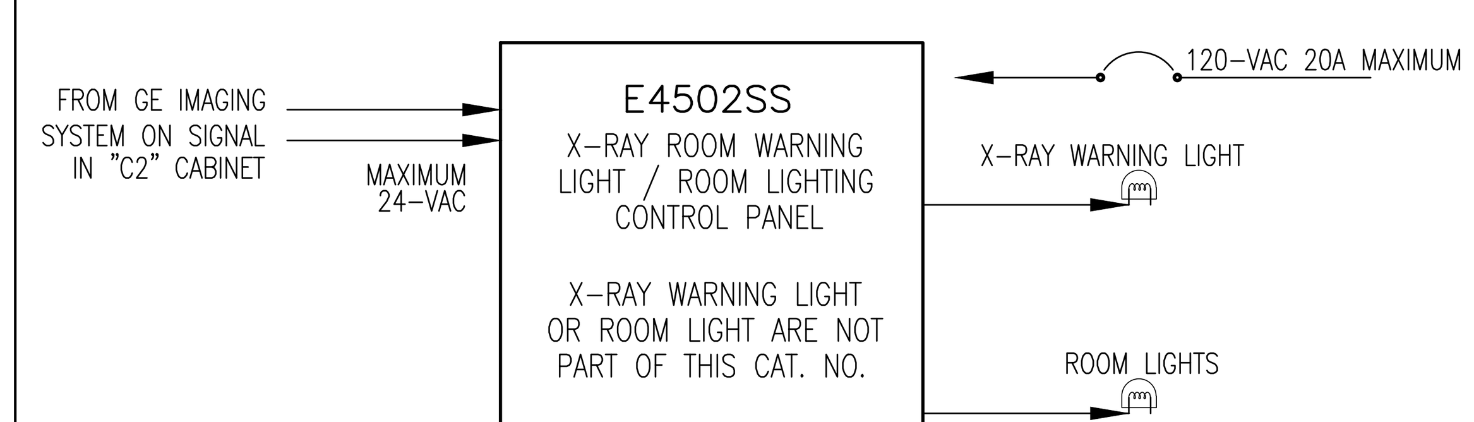
DUCT WIDTH	MINIMUM DIVIDERS REQUIRED
24" [610mm]	2
18" [457mm]	2
10" [254mm]	2
6" [152mm]	1
4" [102mm]	1

DETAIL NOT TO SCALE

ELECTRICAL DETAIL
X-RAY WARNING LIGHT & ROOM LIGHT CONTROL PANEL

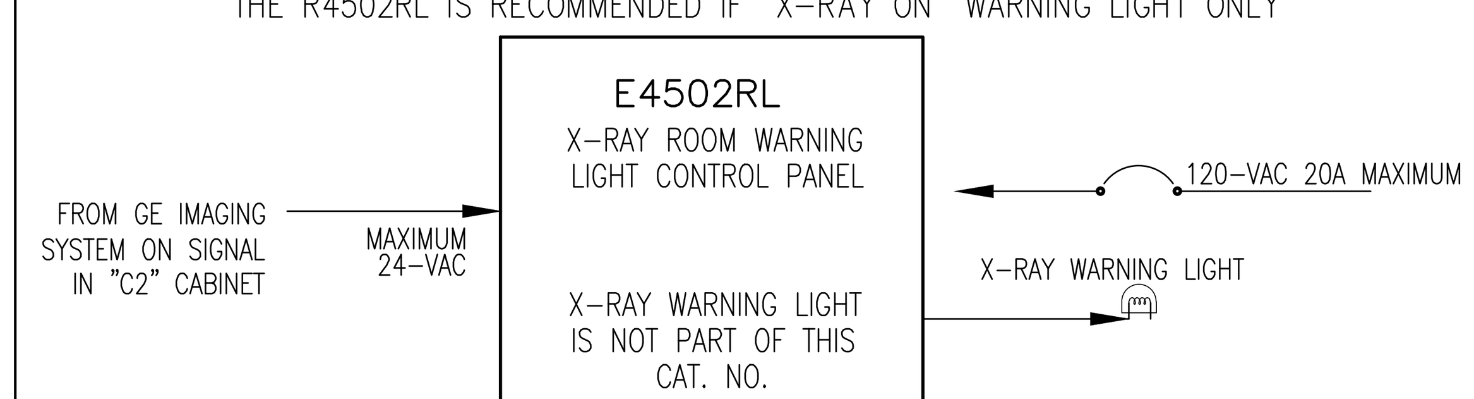
ELEC-157

REV. DATE: 04/23/09



THE E4502SS IS RECOMMENDED IF "X-RAY ON" WARNING LIGHT AND ROOM LIGHT CONTROL ARE UTILIZED

THE R4502RL IS RECOMMENDED IF "X-RAY ON" WARNING LIGHT ONLY



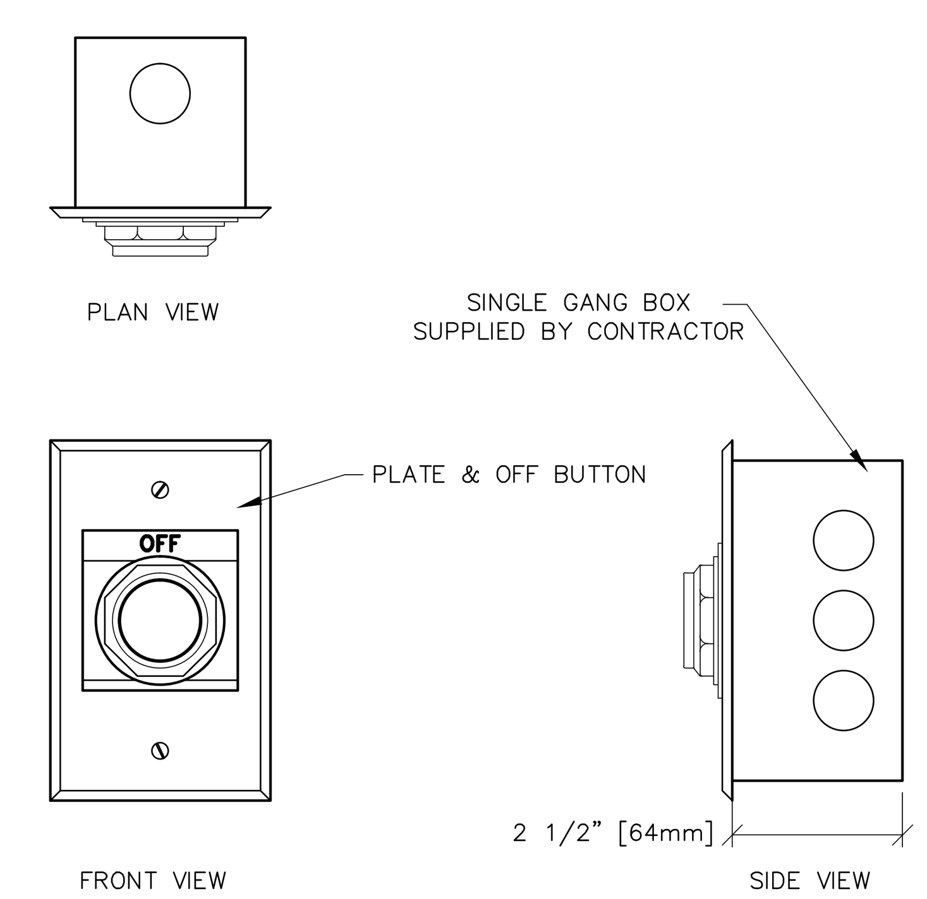
CONTROL PANEL CAN BE LOCATED ABOVE THE CEILING NEAR THE WARNING LIGHT

UNLESS SPECIFIED ON SHEET A1 AS BEING INCLUDED ON EQUIPMENT ORDER, ALL ITEMS ILLUSTRATED ARE TO BE FURNISHED AND INSTALLED BY CUSTOMER'S CONTRACTOR

ELECTRICAL DETAIL
EMERGENCY OFF BUTTON

ELEC-16

REV. DATE: 05/14/09

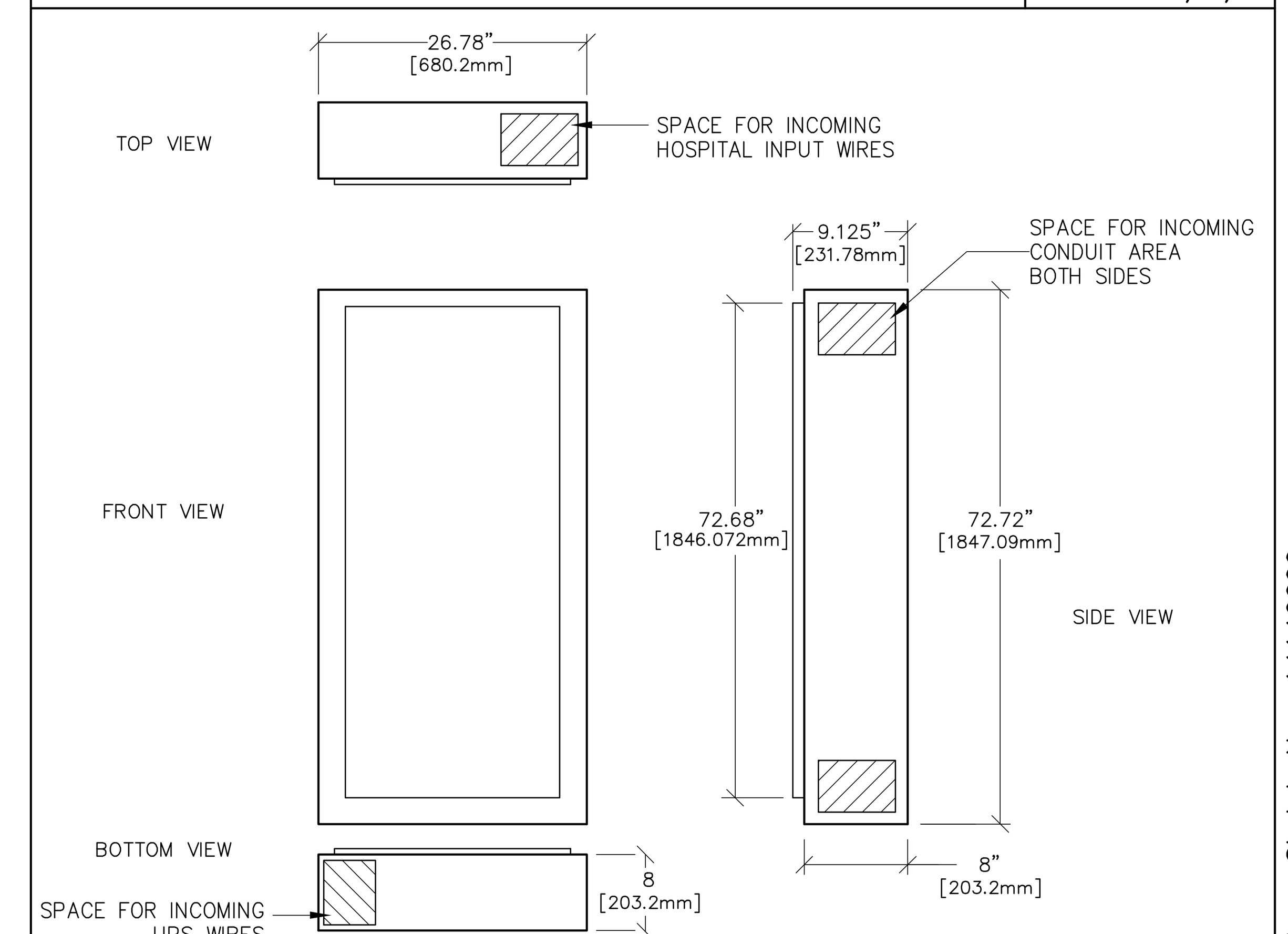


DETAIL NOT TO SCALE

ELECTRICAL DETAIL
INNOVA PLUS MAIN DISCONNECT PANEL

ELEC-161

REV. DATE: 09/27/10



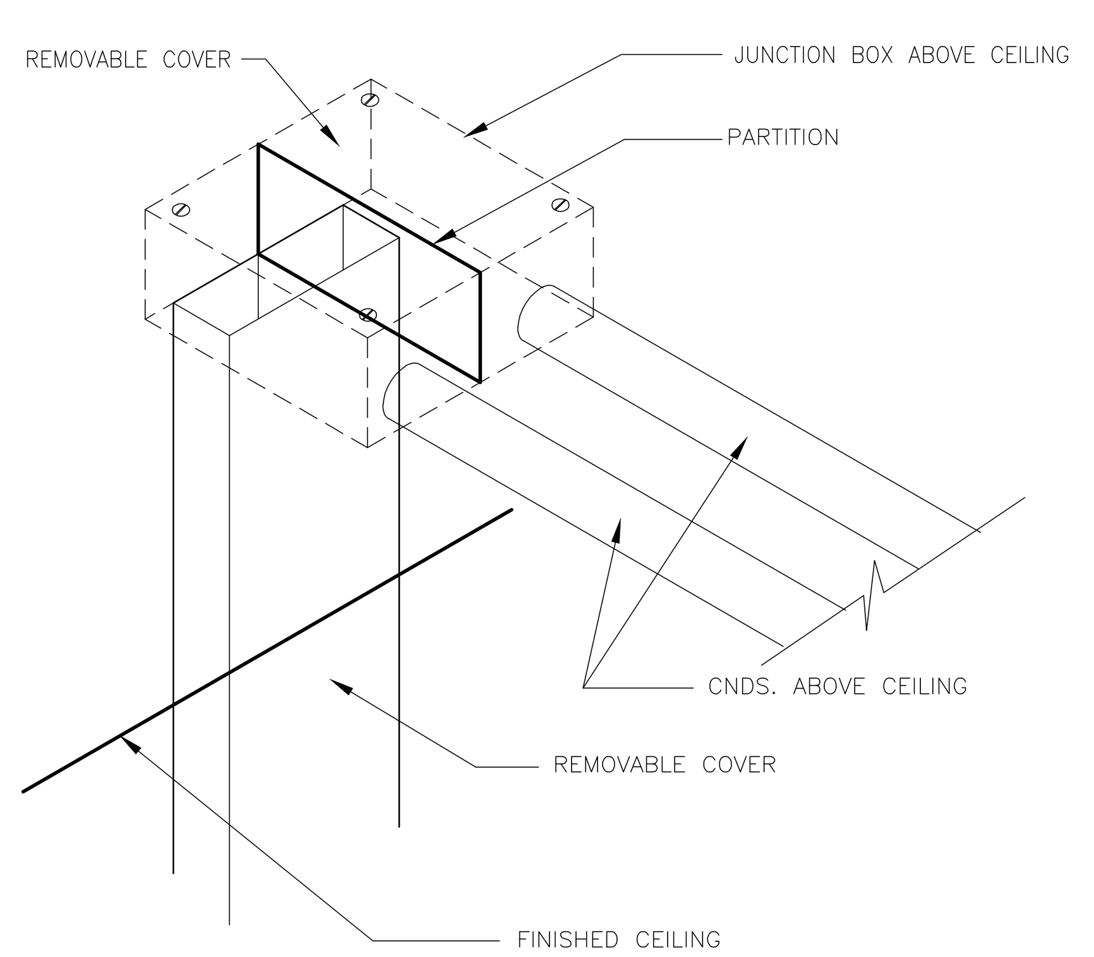
NOTE: LINE WIRES AND UPS WIRES MUST NOT BE MIXED.

DETAIL NOT TO SCALE

ELECTRICAL DETAIL
J.B. / WALL DUCT DETAIL (TYPICAL)

ELEC-2

REV. DATE: 09/30/94



DETAIL NOT TO SCALE

ELECTRICAL DETAIL
INSITE CONNECTION (TYPICAL)

ELEC-1

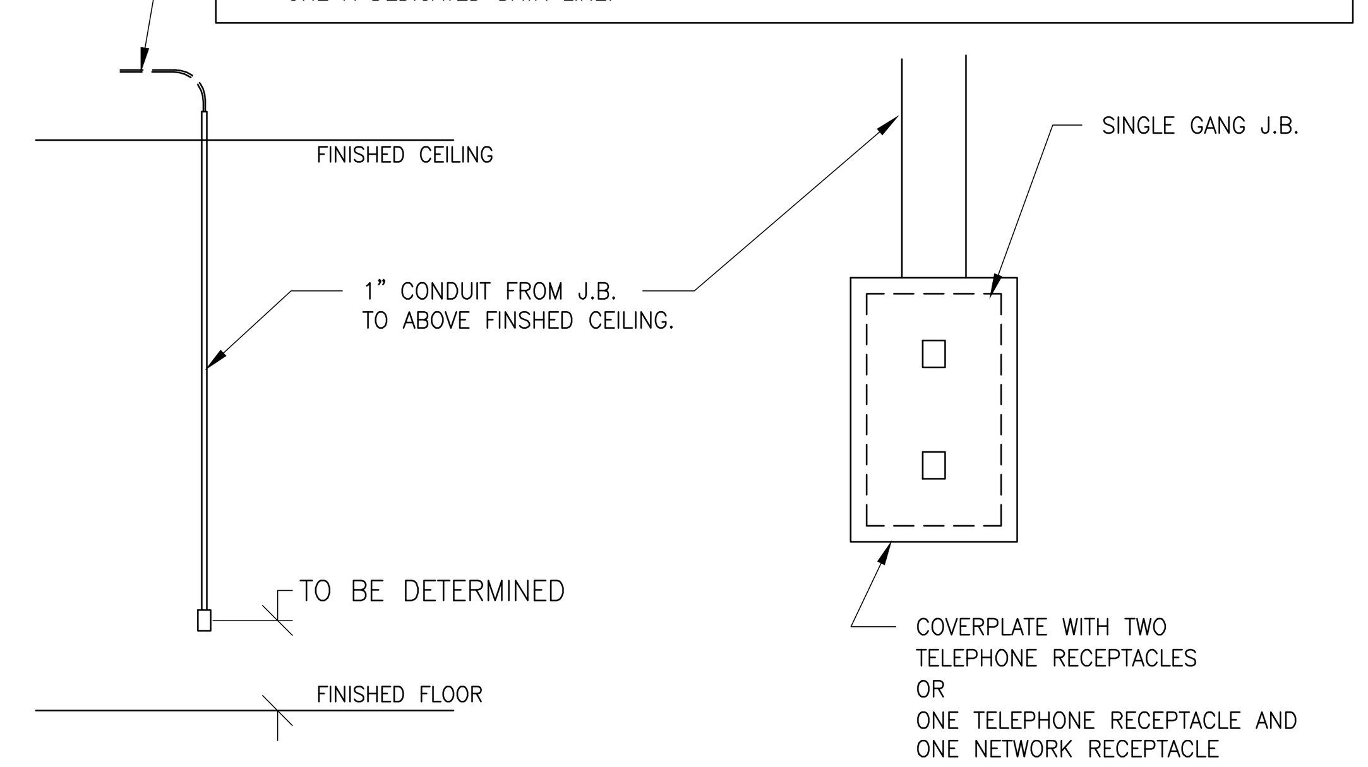
REV. DATE: 04/24/02

ONE OF THE FOLLOWING TWO SELECTIONS MUST BE INSTALLED AT THE LOCATION SHOWN ON THE ELECTRICAL PLAN (SHEET E1) FOR GE INSITE CONNECTION BASED UPON SYSTEM CONFIGURATION.

A) ONE INTERNET ACCESSIBLE VIRTUAL PRIVATE NETWORK (VPN) CONNECTION WITH A STATIC IP ADDRESS, AND ONE TELEPHONE LINE – DEDICATED-DIRECT-DIALING, VOICE GRADE.

OR

B) TWO TELEPHONE LINES – ONE DEDICATED DIRECT-DISTANCE-DIALING, VOICE GRADE AND ONE A DEDICATED DATA LINE.



ALL ITEMS ILLUSTRATED ARE TO BE FURNISHED AND INSTALLED BY CUSTOMER OR THEIR CONTRACTOR.

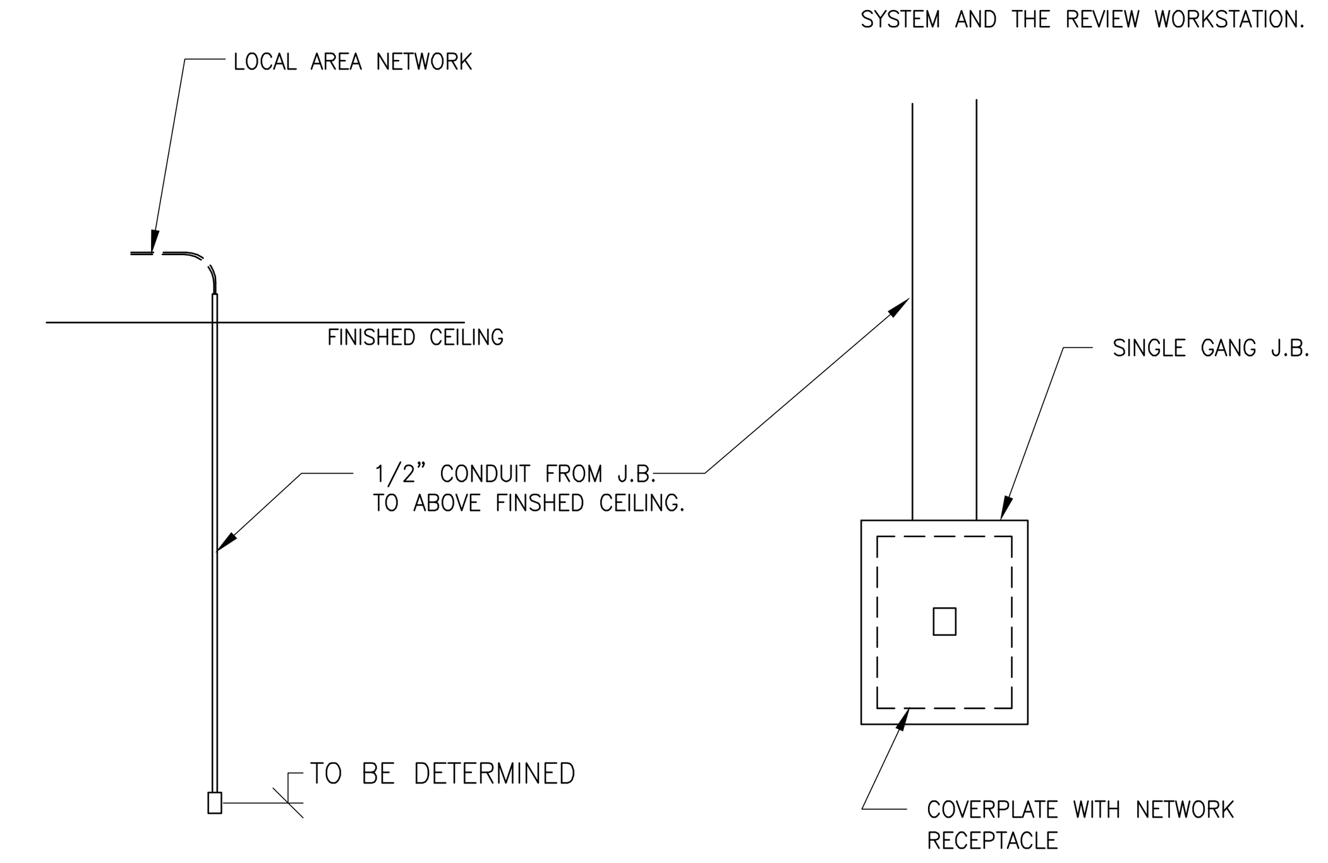
DETAIL NOT TO SCALE

ELECTRICAL DETAIL
NETWORK CONNECTION (TYPICAL)

ELEC-84

REV. DATE: 03/06/04

- FOR NUCLEAR SYSTEMS A DIRECT NETWORK CONNECTION IS TO BE MADE BETWEEN THE SYSTEM AND THE REVIEW WORKSTATION.

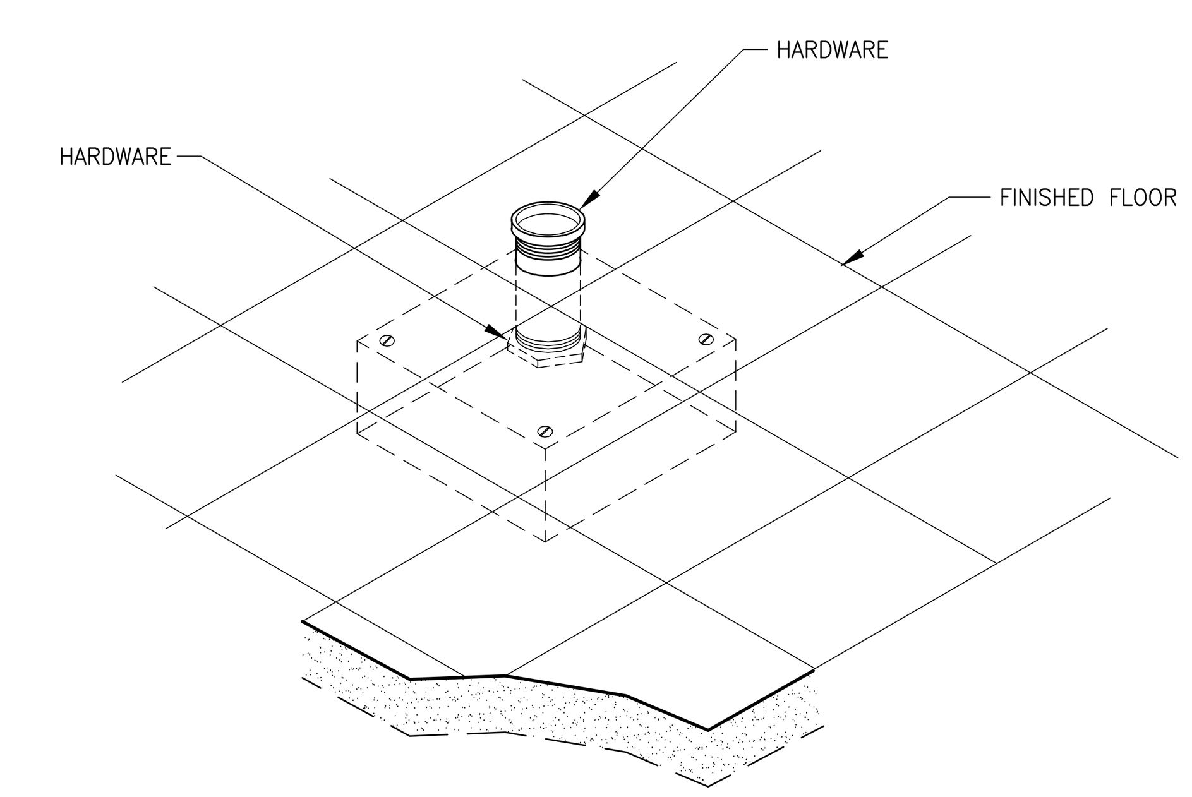


DETAIL NOT TO SCALE

ELECTRICAL DETAIL
TABLE INTERCONNECTION – BOX BELOW FLOOR

ELEC-48

REV. DATE: 01/04/96



DETAIL NOT TO SCALE

This drawing is based on Sketch No.: 14146600

PIM R1

RQ – 144293

GE Healthcare

Healthcare Project Implementation – Design Center
Milwaukee, Wisconsin

SHEET TITLE: ELECTRICAL DETAILS

MODALITY TYPE: DISCOVERY 730 (OR)

PROJECT TITLE: V A PALO ALTO

PALO ALTO, CALIFORNIA

PROJECT	REVISION
141466	01

DATE: 19.Jun.14
DRAWN BY: TST
CHECKED BY: LLM
QT. NO: PR11C12818V1
QT. DT: 01.May.14

REVISION HISTORY:

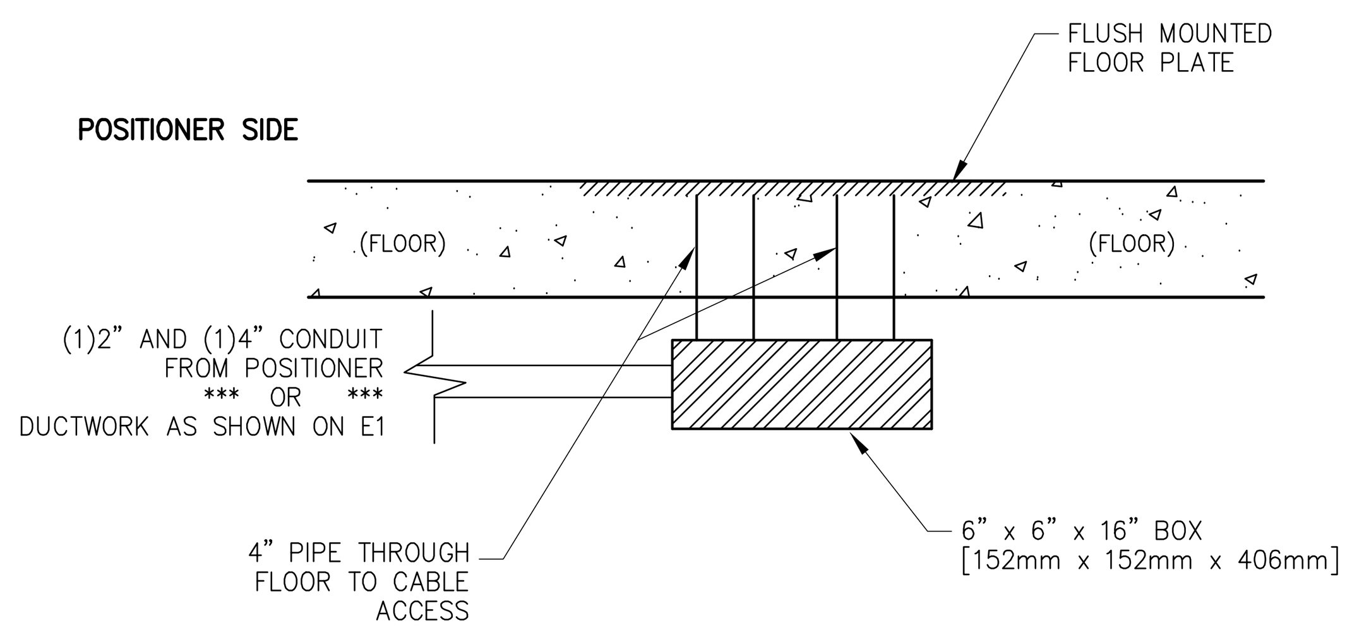
SHEET E3

NFSH-1002

ELECTRICAL DETAIL
TABLE INTERCONNECT DETAIL, UNDER FLOOR

ELEC–134

REV. DATE: 05/10/04



NOTE: PIPE, JUNCTION BOX AND DUCT or CONDUIT ARE TO BE SUPPLIED AND INSTALLED BY CUSTOMER or CUSTOMER'S CONTRACTOR.

DETAIL NOT TO SCALE

This drawing is based on Sketch No.: 14146600

PIM R1

RQ – 144293

THIS SHEET IS PART OF THE DOCUMENT SET LISTED ON SHEET C1 AND SHOULD NOT BE SEPARATED

GE Healthcare

Healthcare Project Implementation – Design Center
Milwaukee, Wisconsin

SHEET TITLE: ELECTRICAL DETAILS

MODALITY TYPE: DISCOVERY 730 (OR)

PROJECT TITLE:

V A PALO ALTO

PALO ALTO, CALIFORNIA

PROJECT	REVISION
141466	01

DATE: 19.Jun.14
DRAWN BY: TST
CHECKED BY: LLM
QT. NO: PR11C12818V1
QT. DT: 01.May.14

REVISION HISTORY:

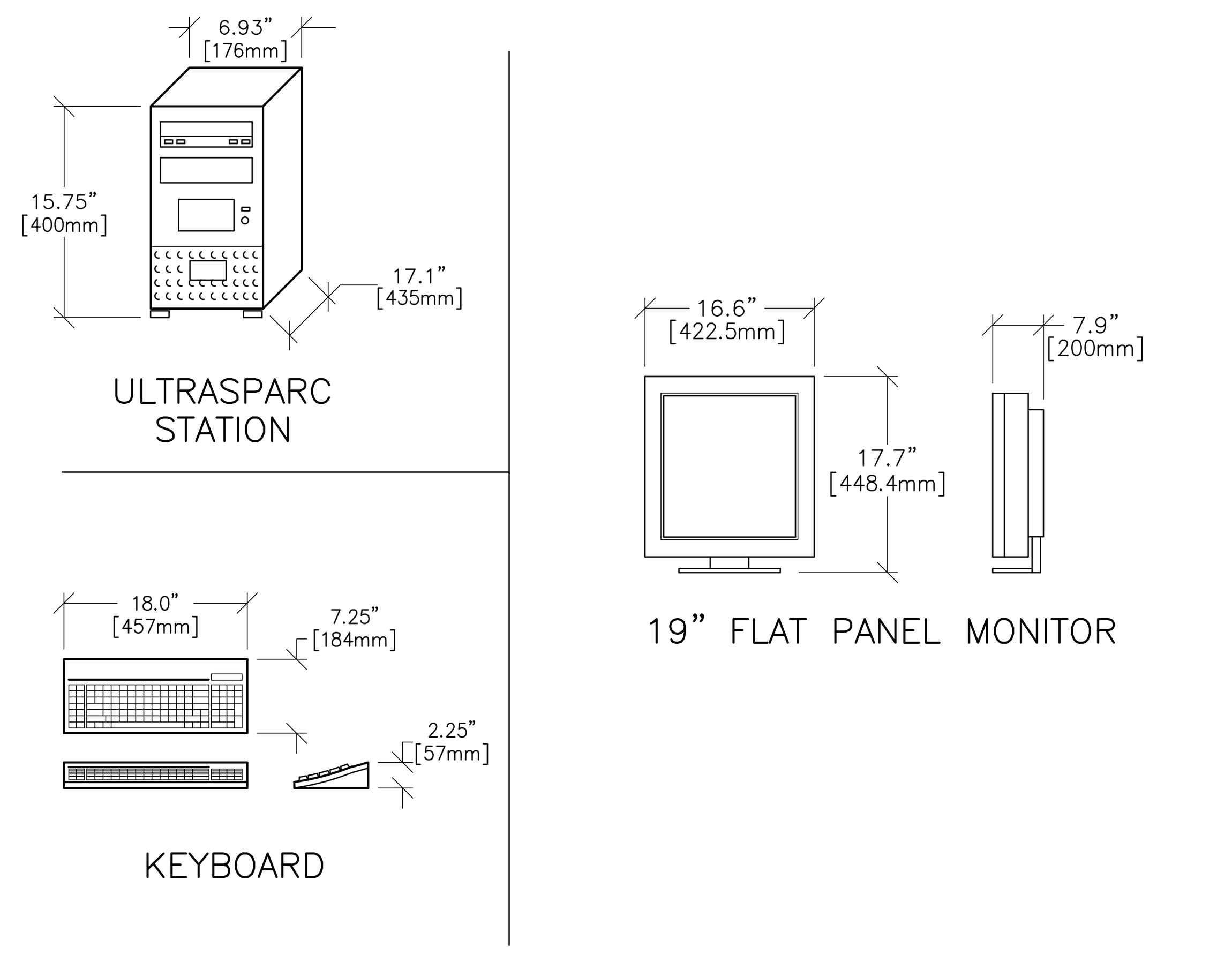
SHEET

E4

NFSH-1002

EQUIPMENT DETAIL
ADVANTAGE WINDOWS WORKSTATION

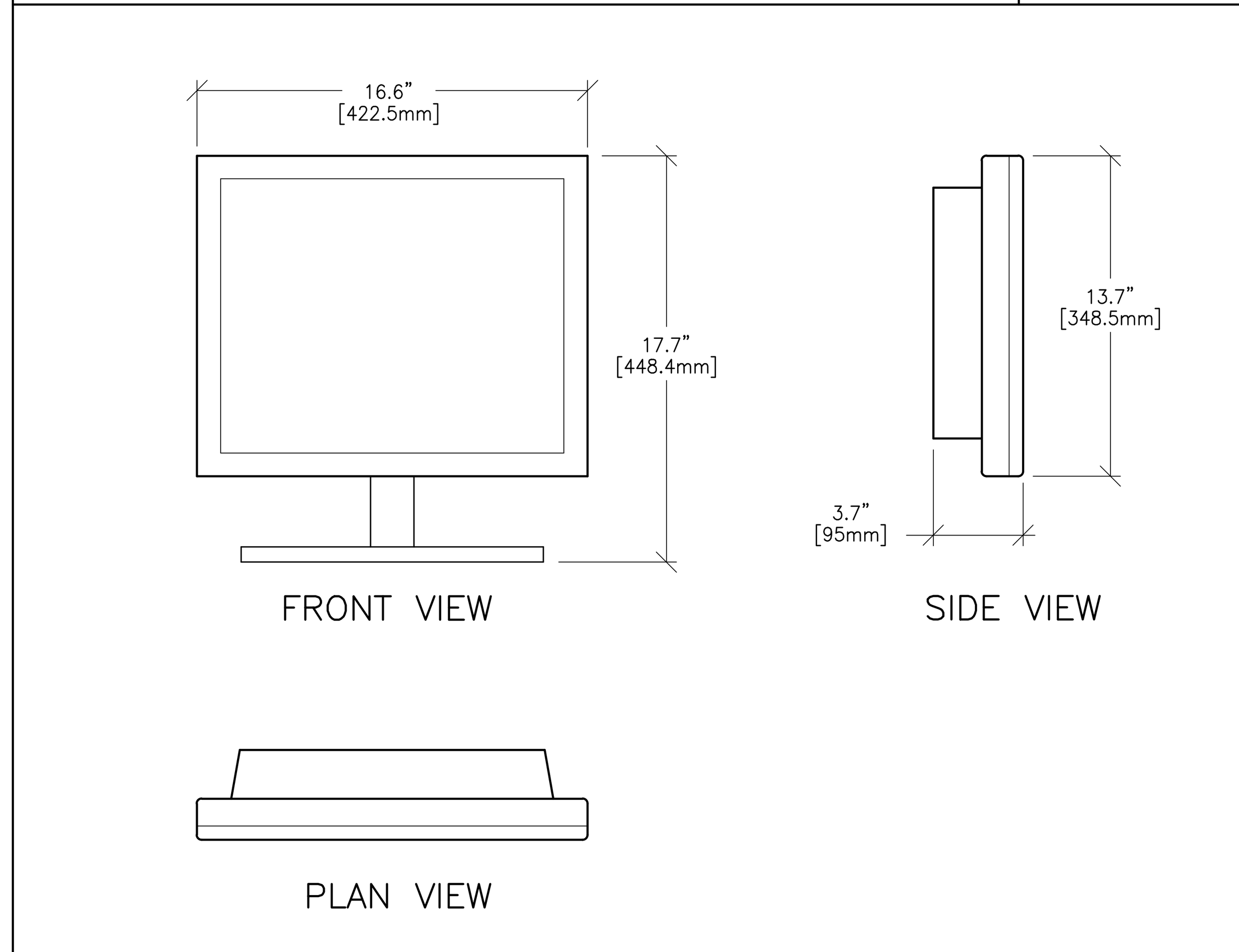
M1013AW
REV. DATE: 20.MAR.12



DETAIL NOT TO SCALE

EQUIPMENT DETAIL
19" FLAT PANEL MONITOR WITH STAND

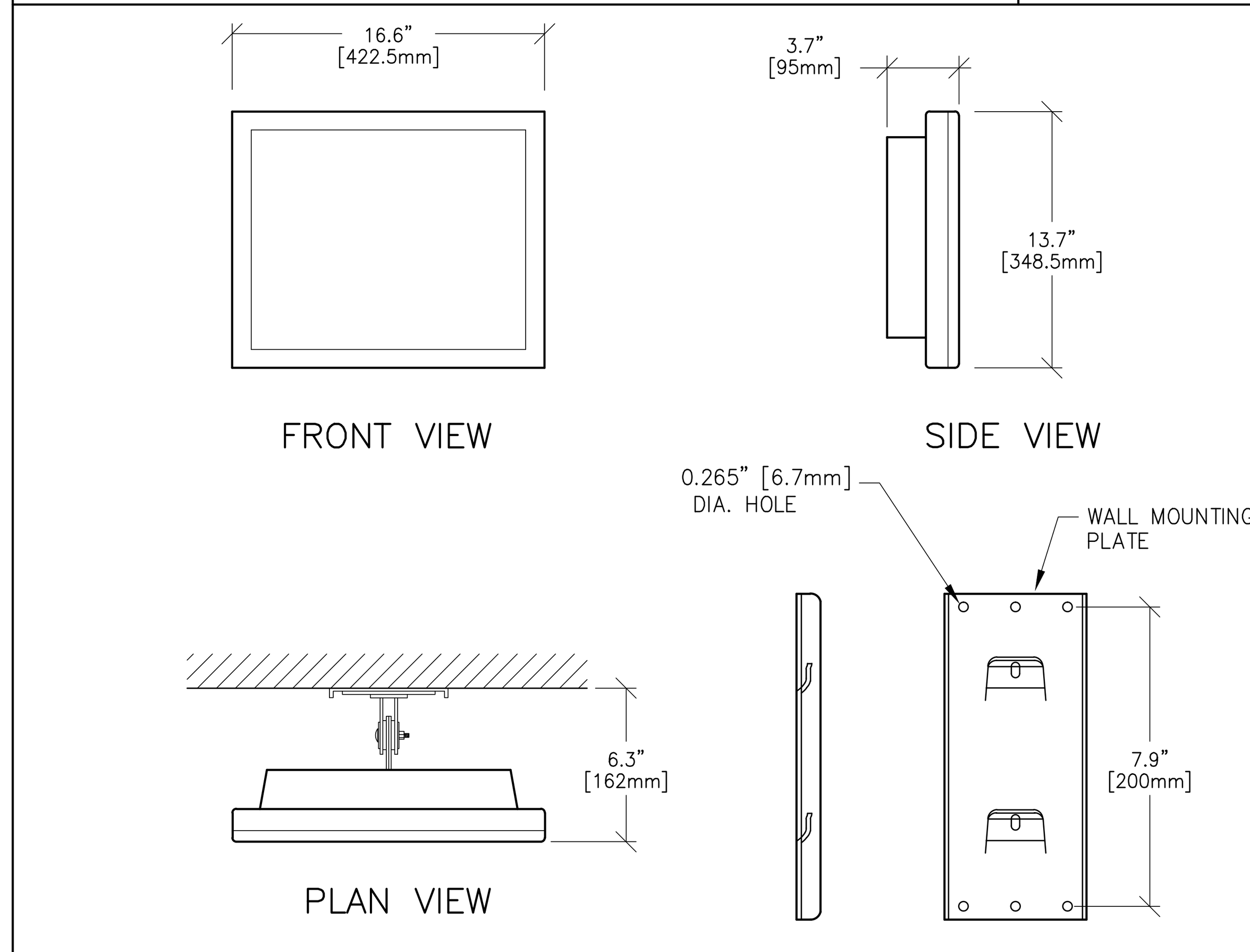
C7619D
REV. DATE: 20.MAR.12



DETAIL NOT TO SCALE

EQUIPMENT DETAIL
19" FLAT PANEL MONITOR ON WALL SUPPORT

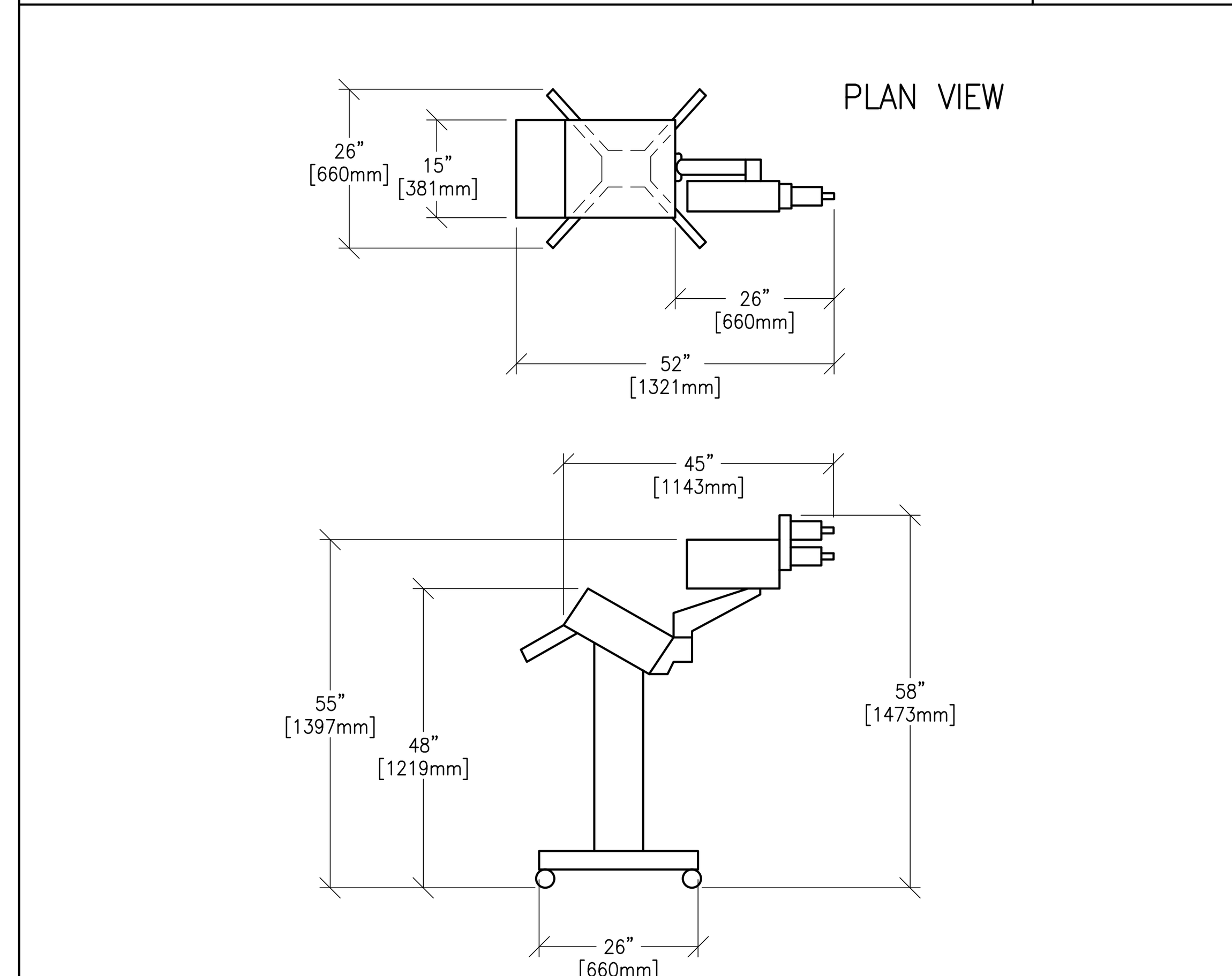
C7619W
REV. DATE: 20.MAR.12



DETAIL NOT TO SCALE

EQUIPMENT DETAIL
INJECTOR ON MOBILE PEDESTAL

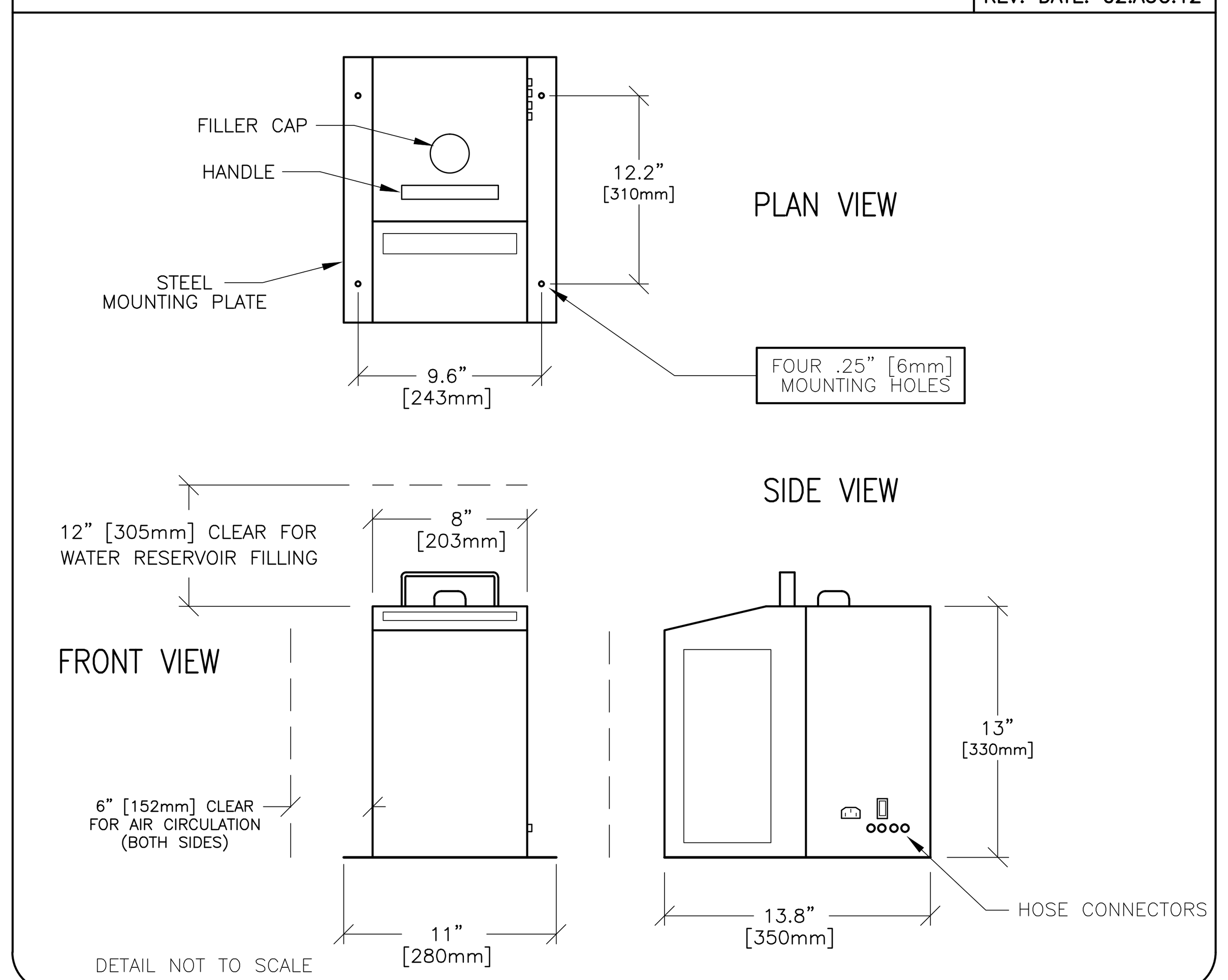
B50-30
REV. DATE: 28.JUN.12



DRAWING NOT TO SCALE

EQUIPMENT DETAIL
DETECTOR CONDITIONER

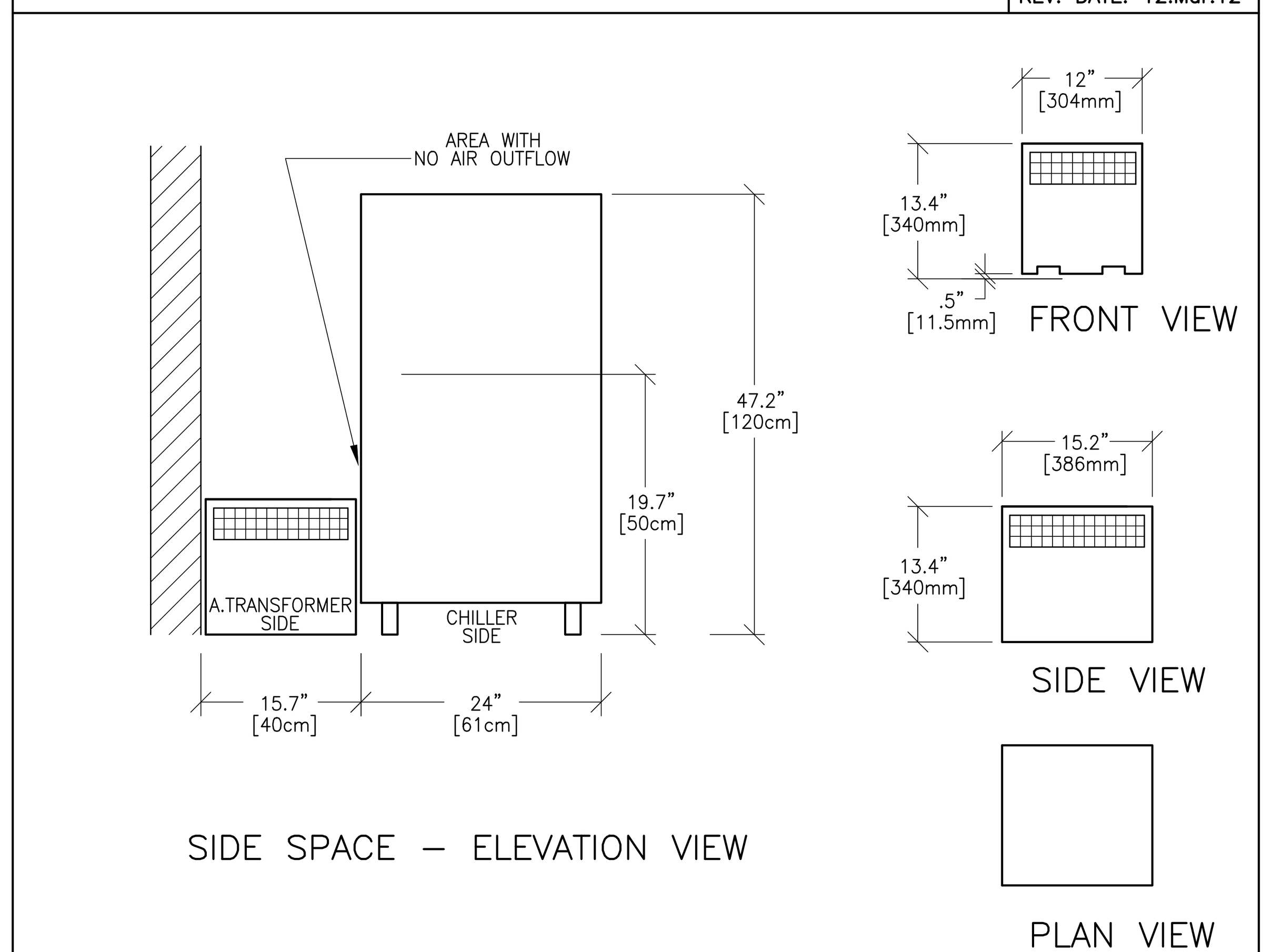
B5049F
REV. DATE: 02.AUG.12



DETAIL NOT TO SCALE

EQUIPMENT DETAIL
COOLIX 4100 CHILLER AUTOTRANSFORMER

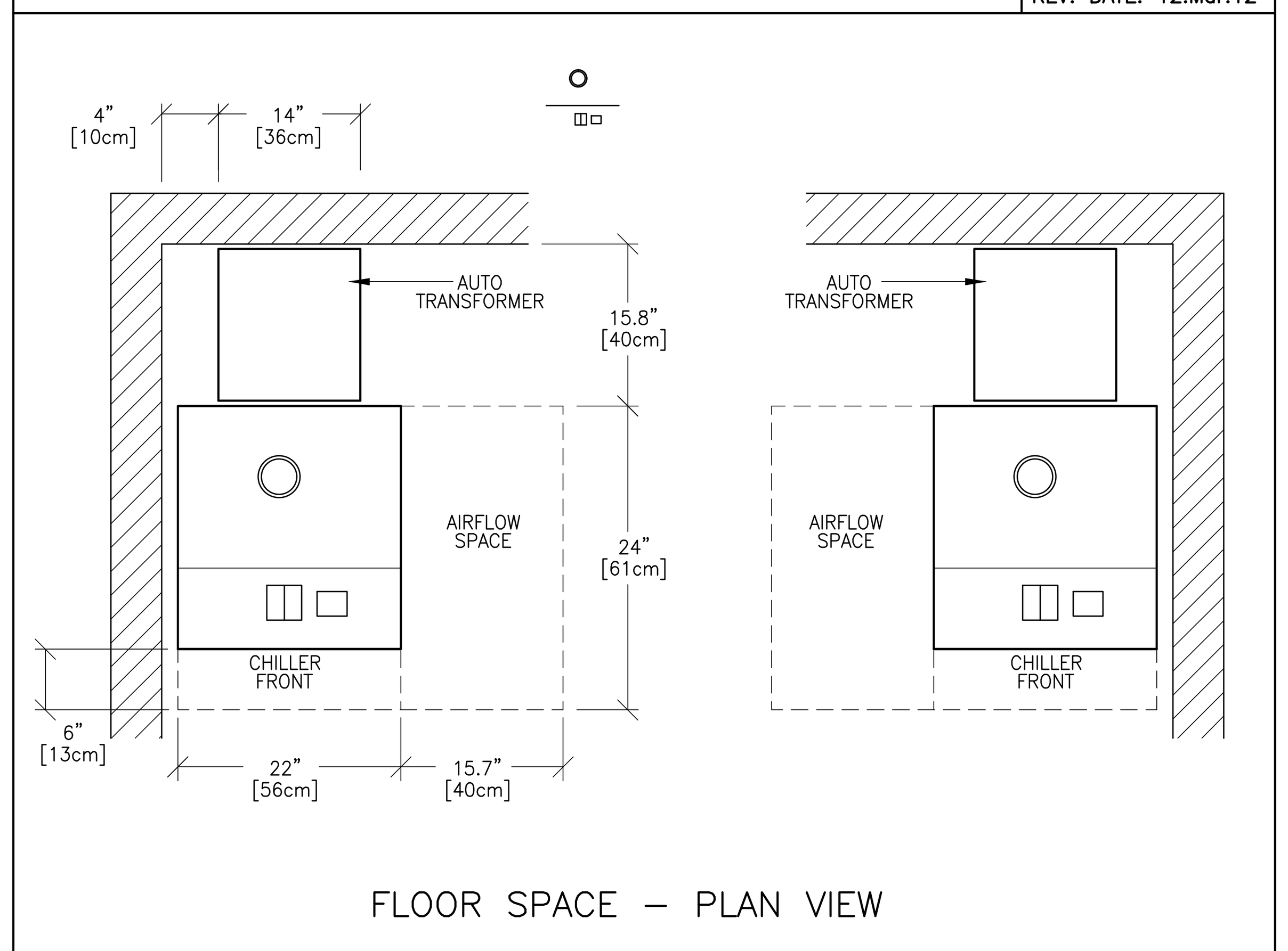
B-IGS05
REV. DATE: 12.Mar.12



DETAIL NOT TO SCALE

EQUIPMENT DETAIL
COOLIX 4100 CHILLER – FLOOR SPACE

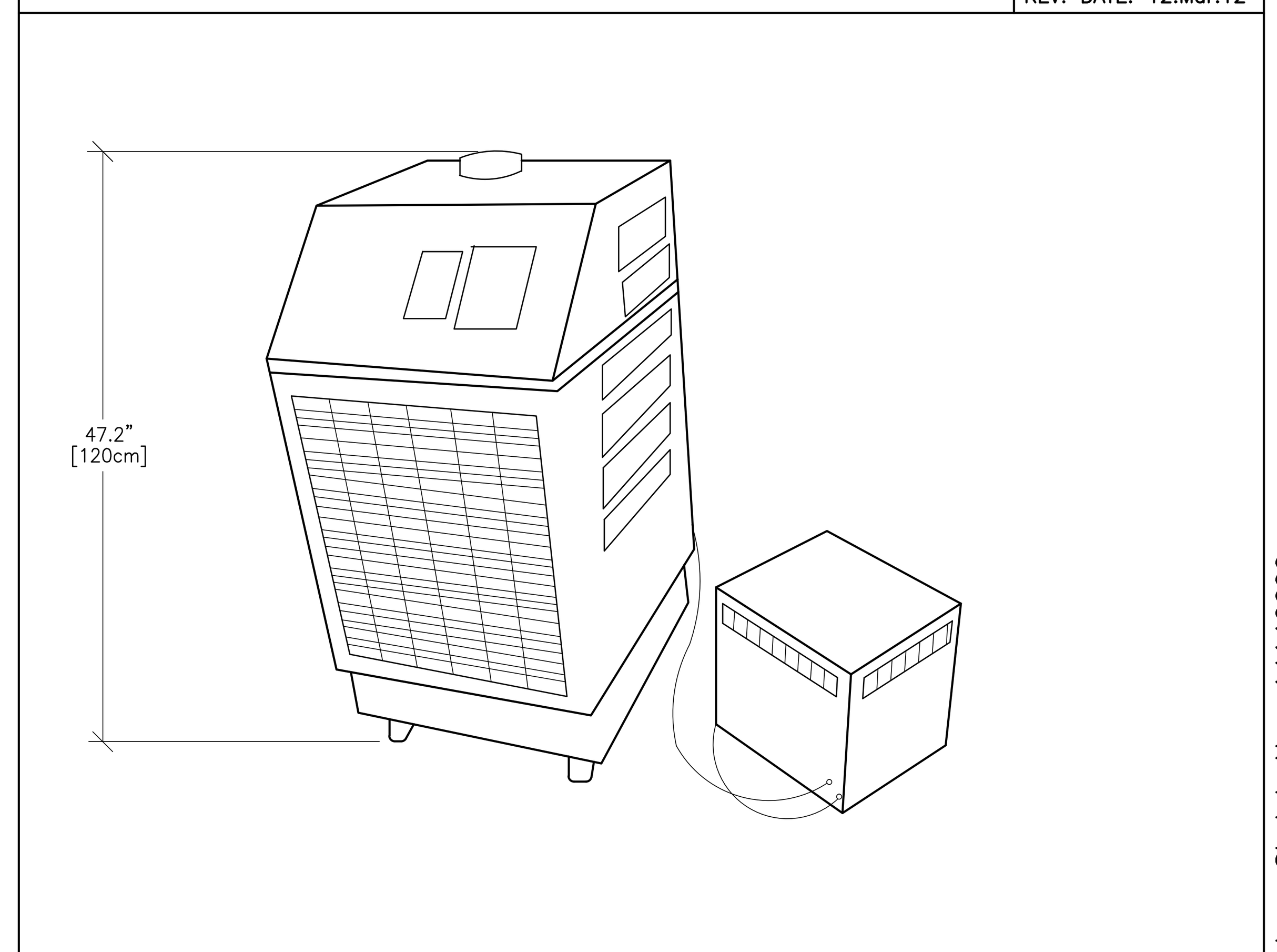
B-IGS03
REV. DATE: 12.Mar.12



DETAIL NOT TO SCALE

EQUIPMENT DETAIL
COOLIX 4100 CHILLER AND AUTOTRANSFORMER

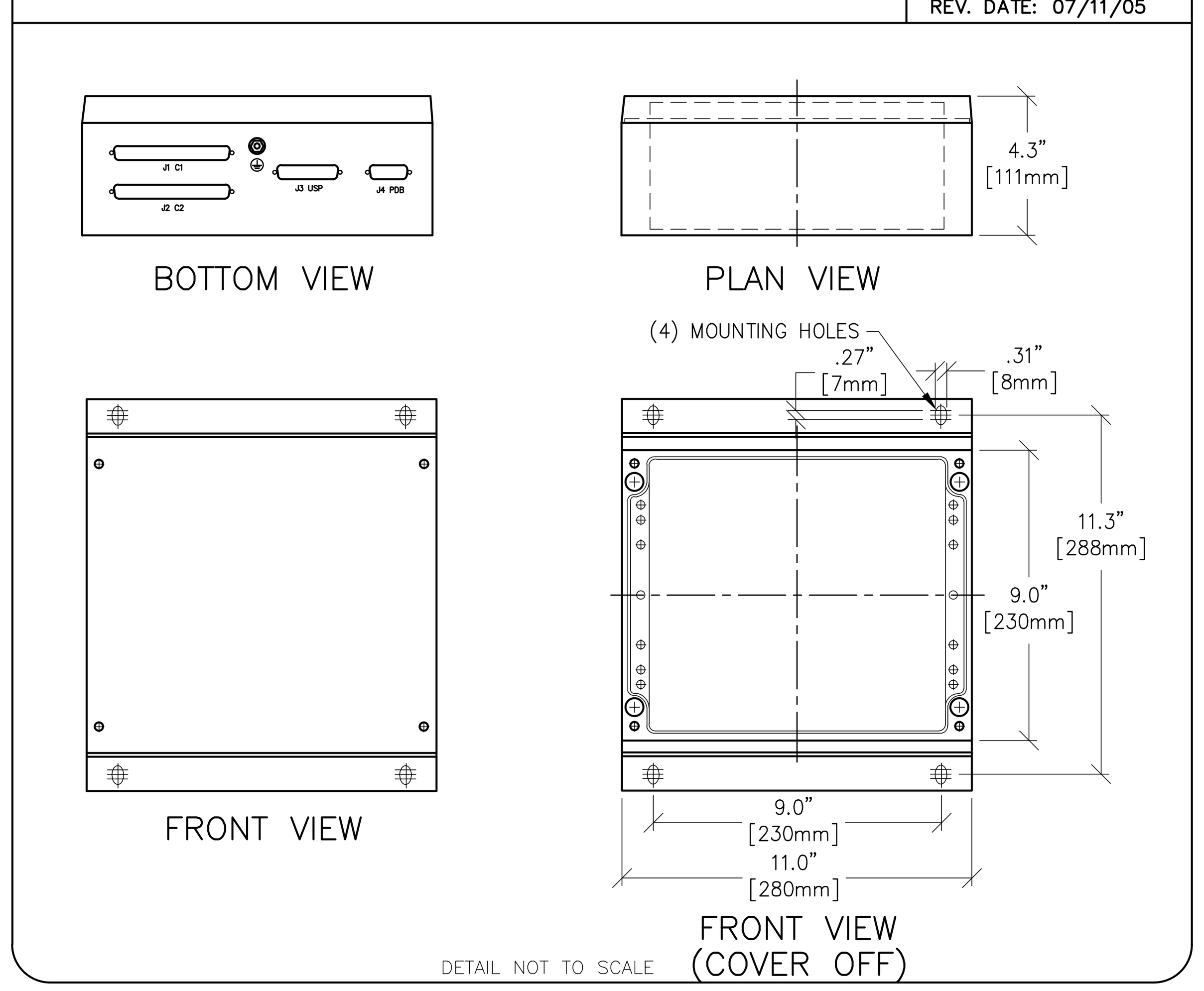
B-IGS04
REV. DATE: 12.Mar.12



DETAIL NOT TO SCALE

EQUIPMENT DETAIL
UPS INTERFACE BOX

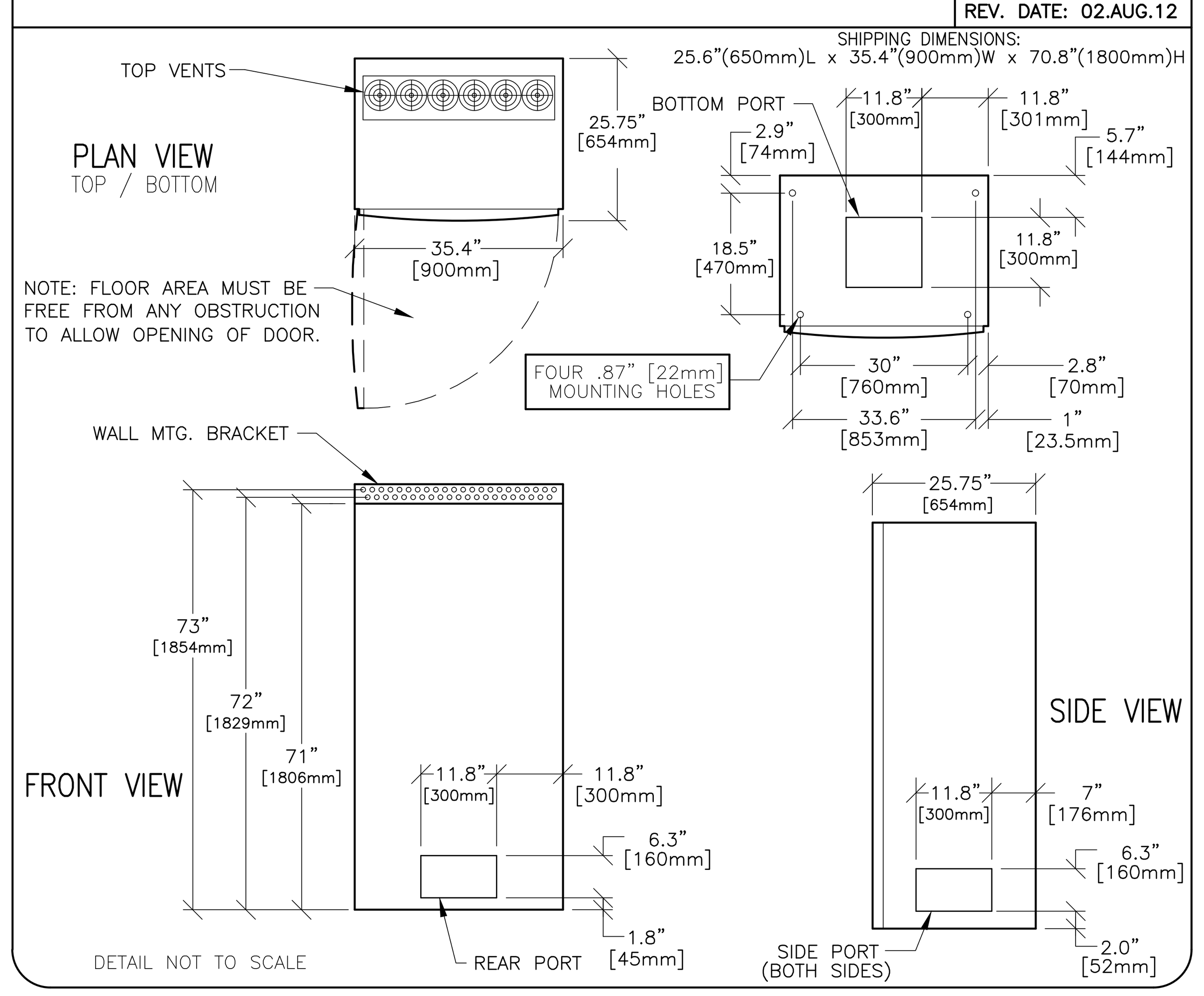
E4502IB
REV. DATE: 07/11/05



DETAIL NOT TO SCALE

EQUIPMENT DETAIL
ATLAS CABINETS

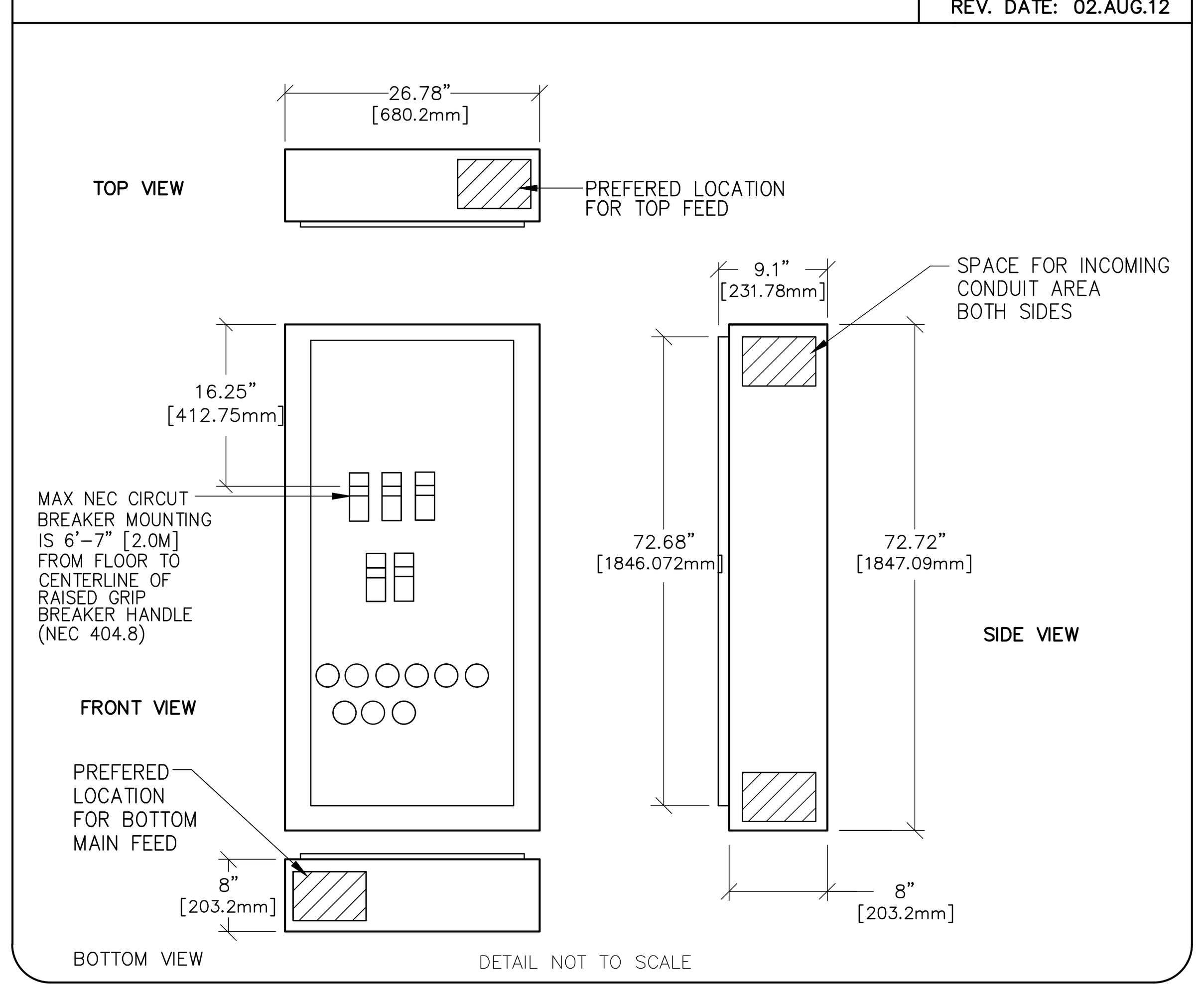
B0558C
REV. DATE: 02.AUG.12



DETAIL NOT TO SCALE

EQUIPMENT DETAIL
INNOVA/DISCOVERY IGS MAIN DISCONNECT PANEL

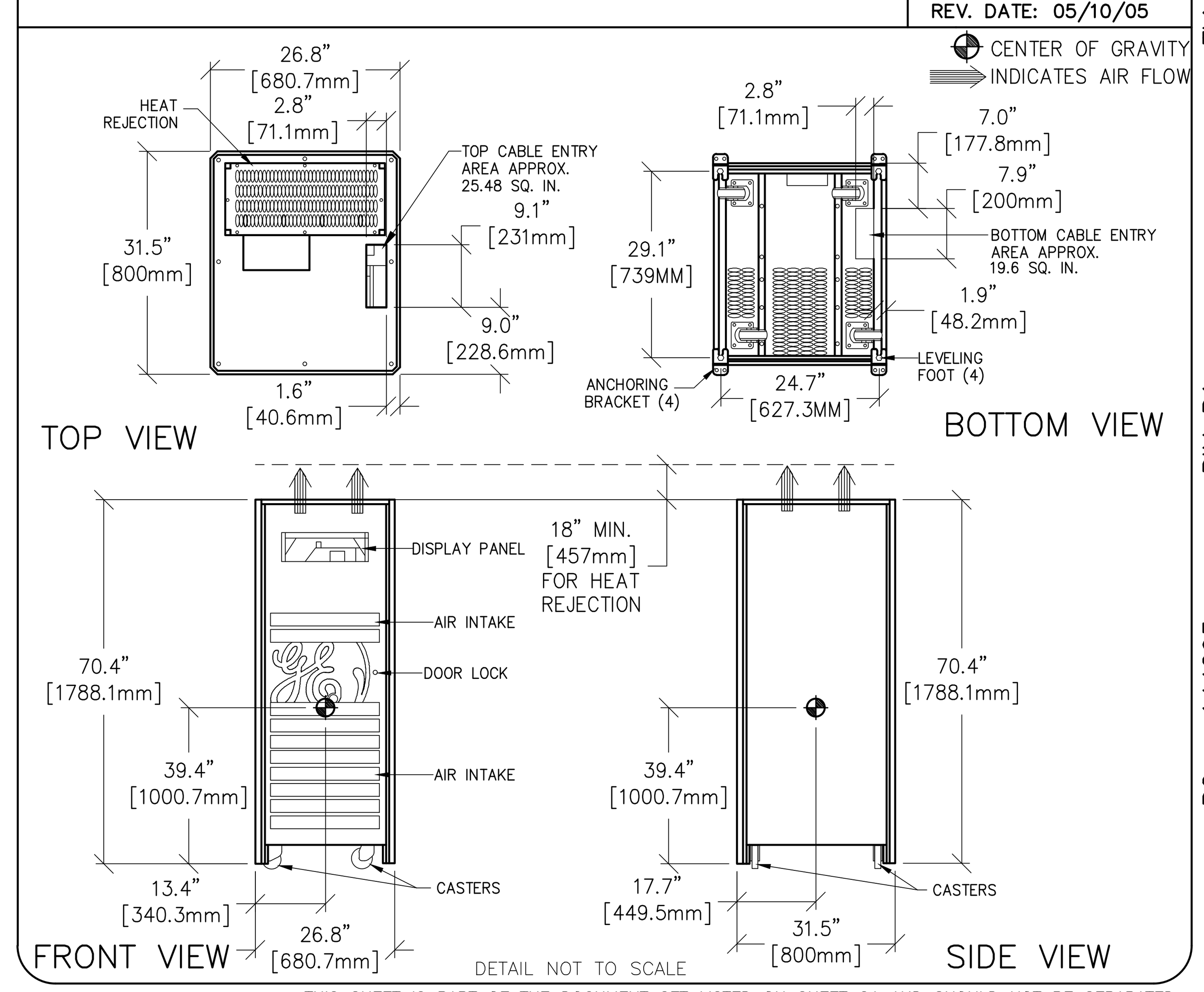
E4502M
REV. DATE: 02.AUG.12



DETAIL NOT TO SCALE

EQUIPMENT DETAIL
DIGITAL ENERGY SG SERIES 10–20kVA UPS

E4502SG
REV. DATE: 05/10/05



DETAIL NOT TO SCALE

THIS SHEET IS PART OF THE DOCUMENT SET LISTED ON SHEET C1 AND SHOULD NOT BE SEPARATED

This drawing is based on Sketch No.: 14146600

PIM R1

RQ – 144293

GE Healthcare

Healthcare Project Implementation – Design Center
Milwaukee, Wisconsin

SHEET TITLE: EQUIPMENT DETAILS

MODALITY TYPE: DISCOVERY 730 (OR)

THIS PLAN IS SUBMITTED TO SUGGEST LOCATION OF GE HEALTHCARE EQUIPMENT AND ASSOCIATED APPARATUS, ELECTRICAL WIRING DETAILS AND ROOM ARRANGEMENTS. IN PREPARING THIS PLAN, EVERY EFFORT HAS BEEN MADE TO CONFORM DETAILS TO ACTUAL EQUIPMENT EXPECTED TO BE INSTALLED. IT IS NOT TO BE USED FOR ACTUAL CONSTRUCTION PURPOSES, HOWEVER, AND THE COMPANY CANNOT ACCEPT RESPONSIBILITY FOR ANY DAMAGES RESULTING THEREFROM.

PROJECT TITLE: V A PALO ALTO
PALO ALTO, CALIFORNIA

PROJECT	REVISION
141466	01

DATE: 19.Jun.14
DRAWN BY: TST
CHECKED BY: LLM
QT. NO: PR11C12818V1
QT. DT: 01.May.14

REVISION HISTORY:

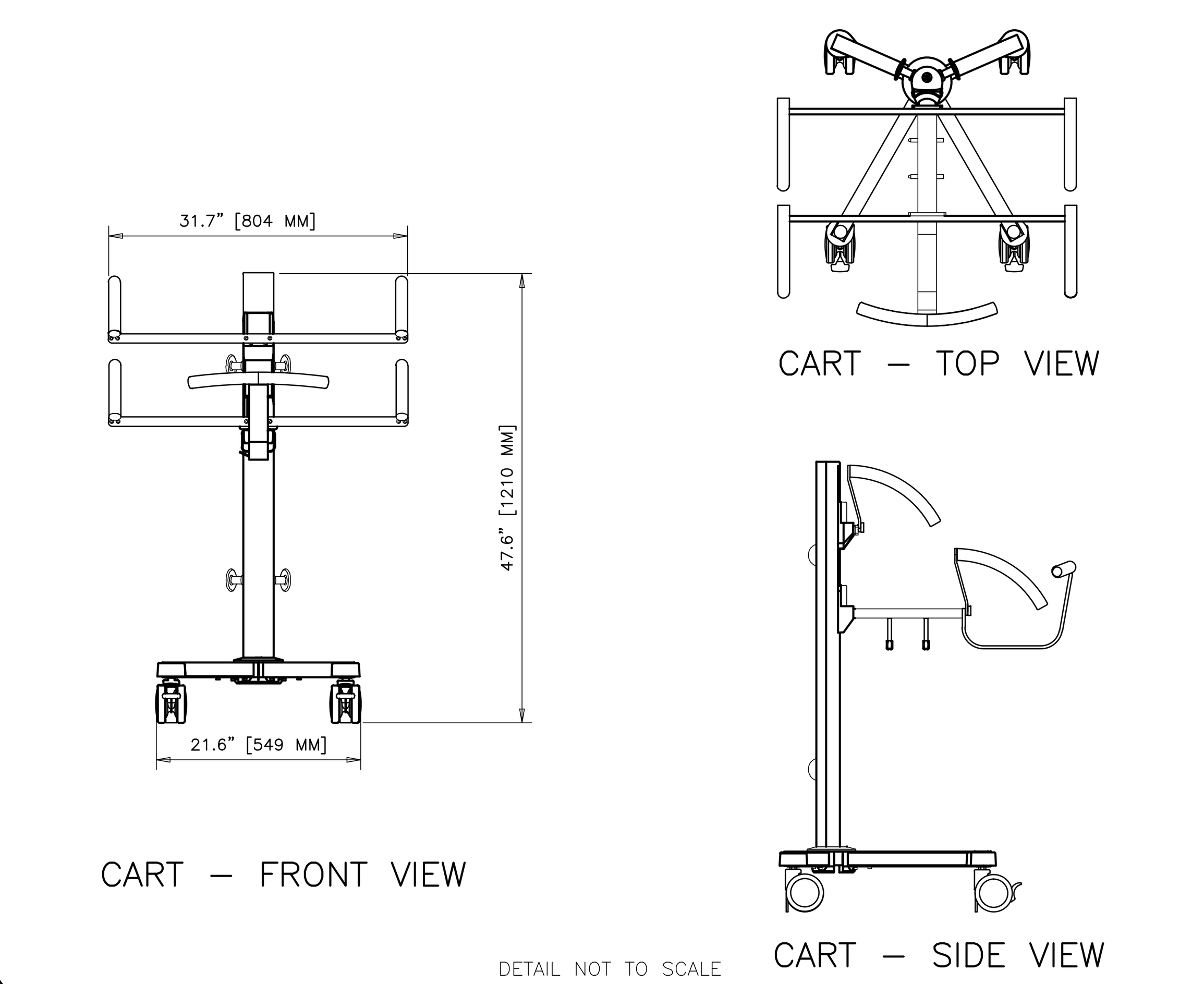
SHEET
D1

NFSH-1002

EQUIPMENT DETAIL
TABLESIDE CART

B–IGS06

REV. DATE: 12.APR.12

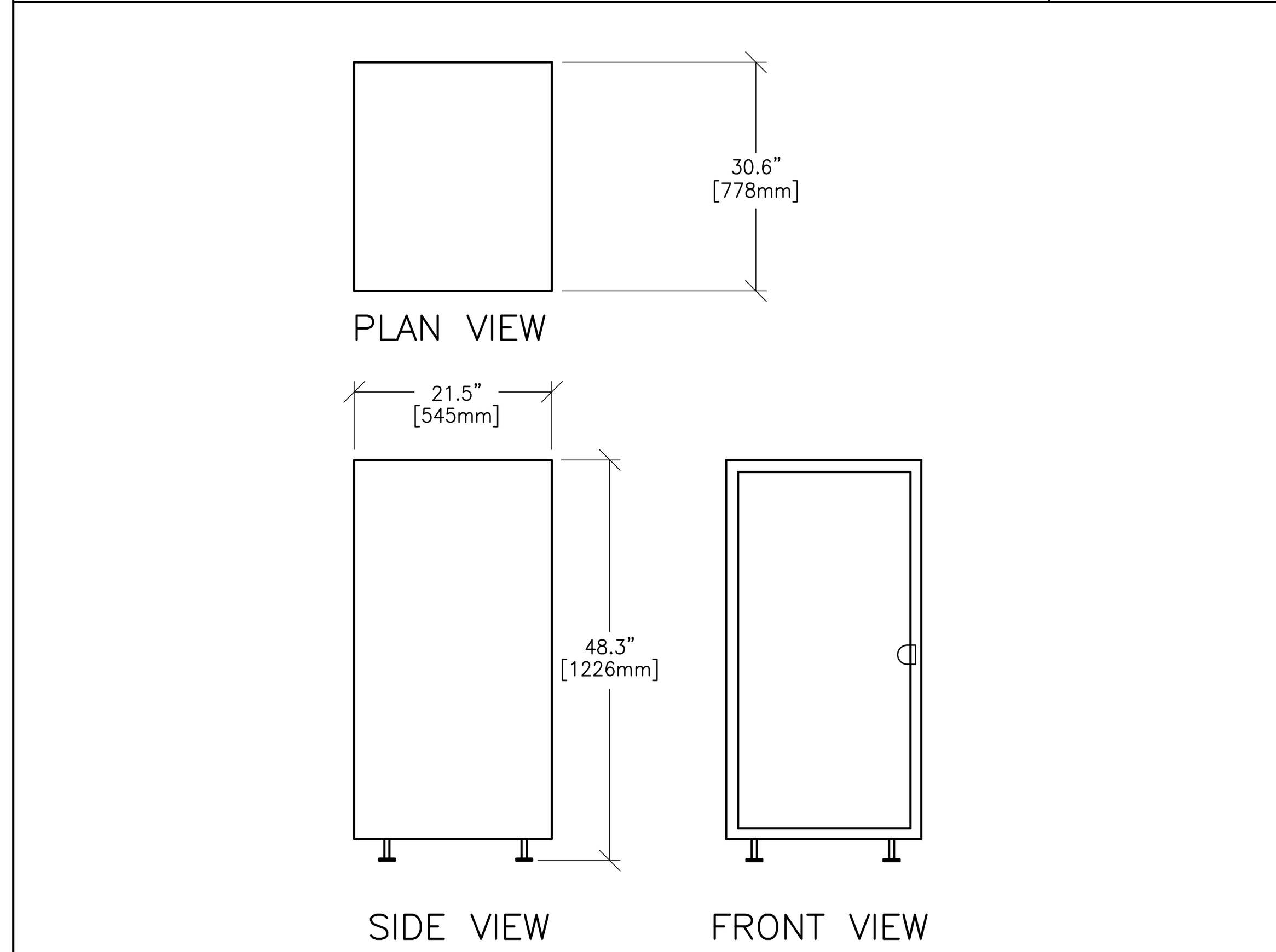


DETAIL NOT TO SCALE

EQUIPMENT DETAIL
LARGE DISPLAY CABINET

B2014

REV. DATE: 15.MAR.12

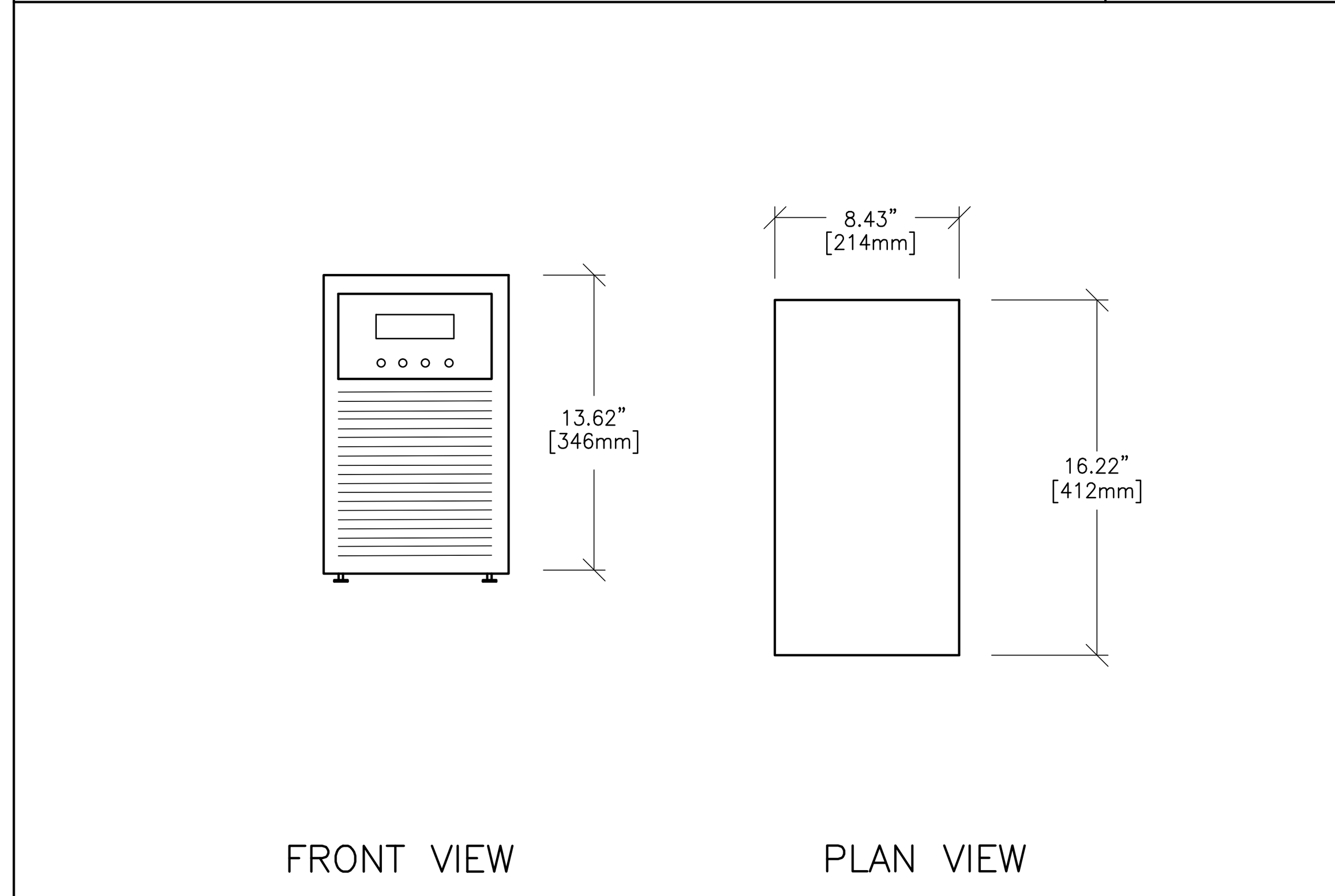


DETAIL NOT TO SCALE

EQUIPMENT DETAIL
3kVA UPS (LARGE DISPLAY SUBSYSTEM OPTION)

B2016

REV. DATE: 15.MAR.12

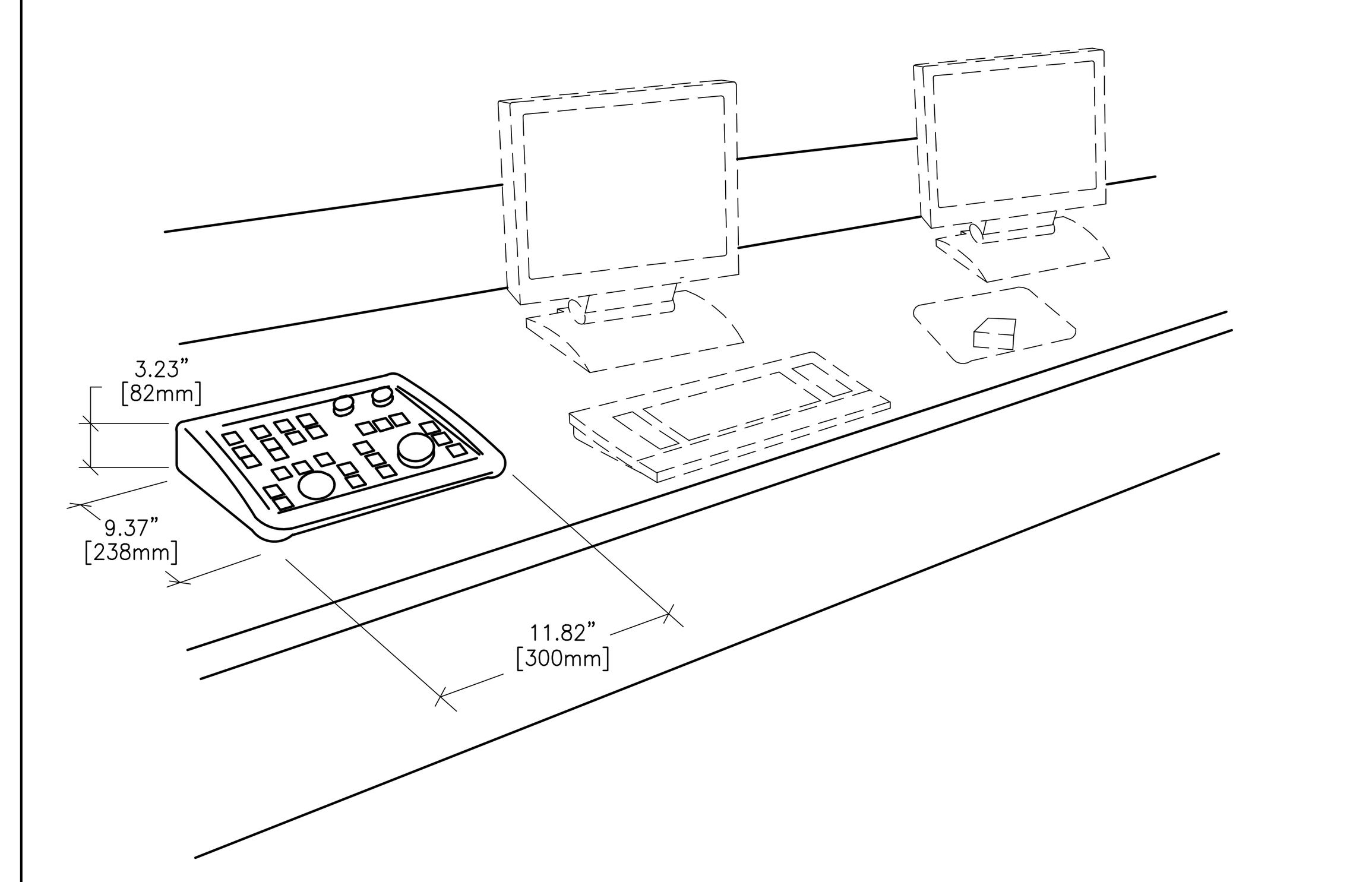


DETAIL NOT TO SCALE

EQUIPMENT DETAIL
DL KEYPAD

C7412H

REV. DATE: 02.AUG.12

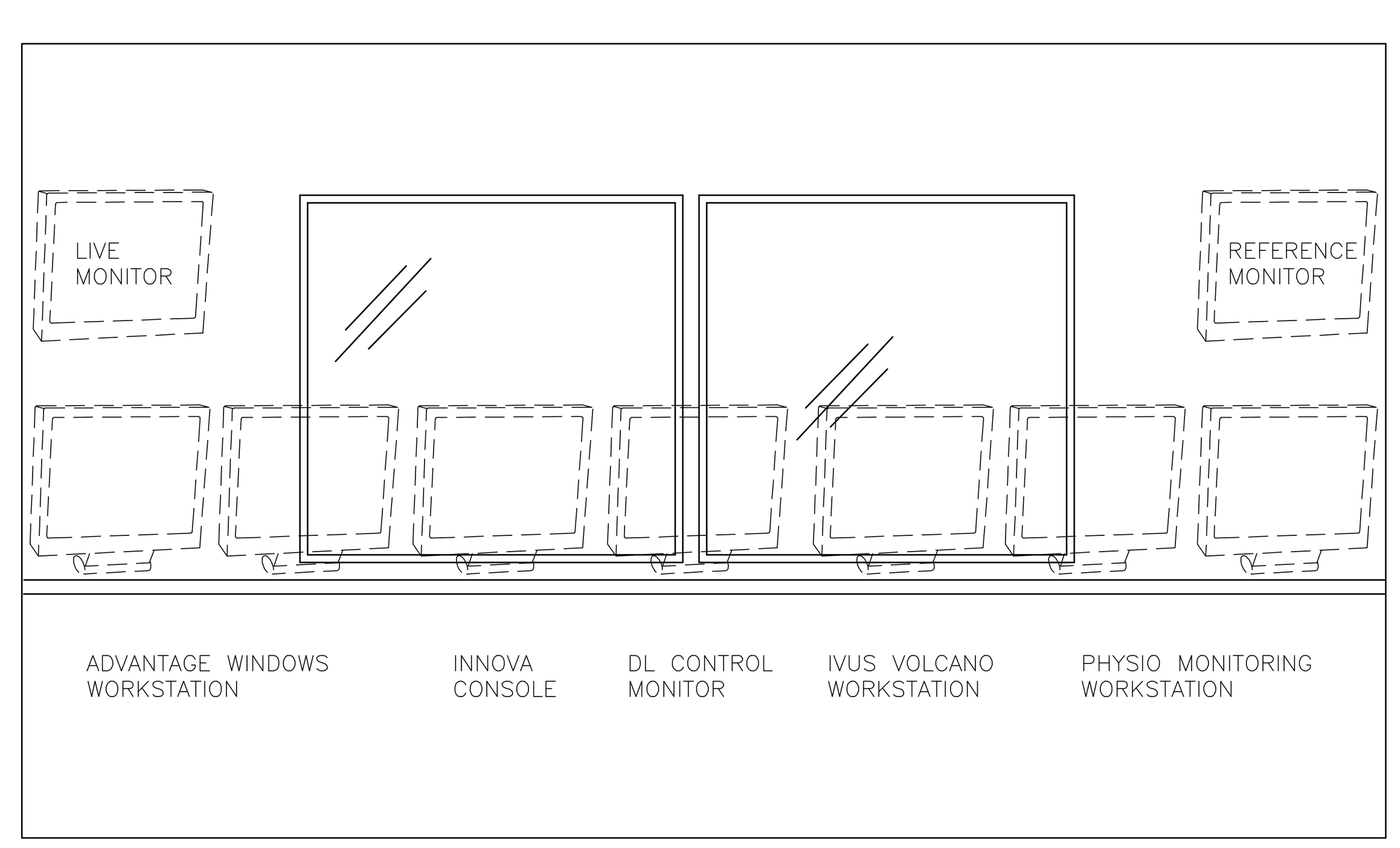


DETAIL NOT TO SCALE

TYPICAL CONTROL ROOM
SINGLE PLANE SYSTEM

B5050C

REV. DATE: 02.AUG.12

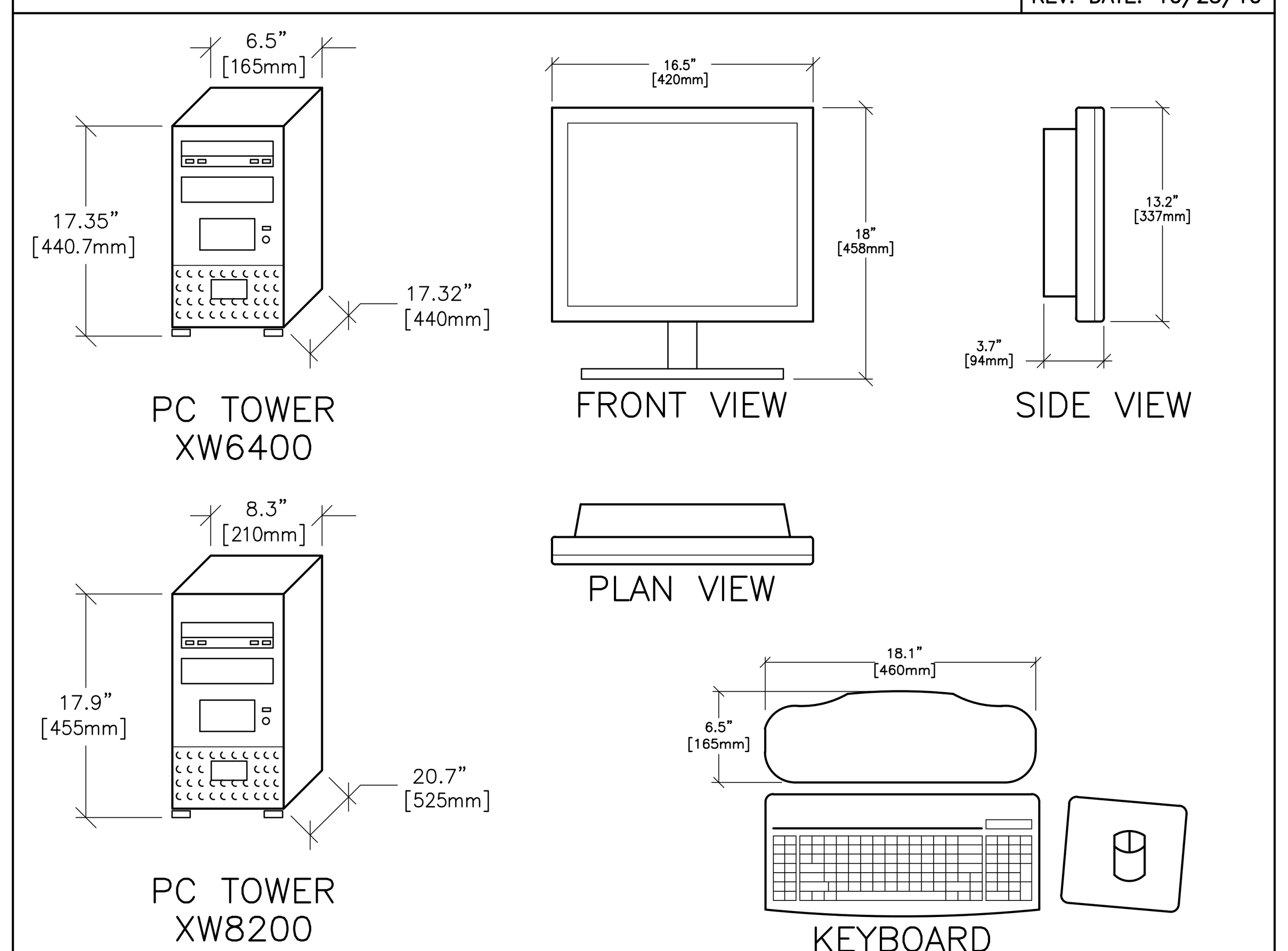


DETAIL NOT TO SCALE

EQUIPMENT DETAIL
RCIM WITH DL KEYBOARD CONSOLE

C75–02

REV. DATE: 10/25/10

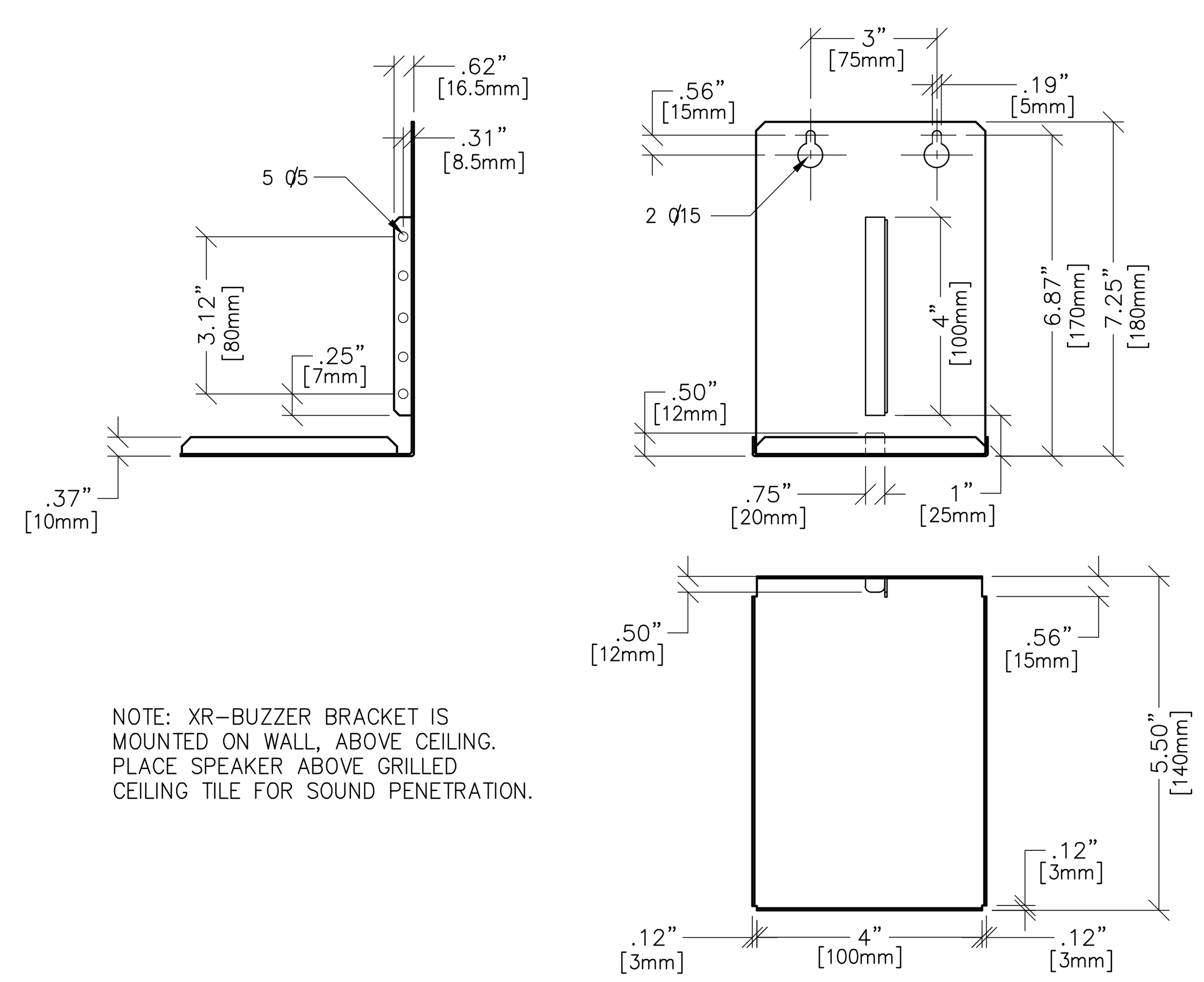


DETAIL NOT TO SCALE

EQUIPMENT DETAIL
XR–BUZZER BRACKET

B5150H

REV. 00: 10/30/08



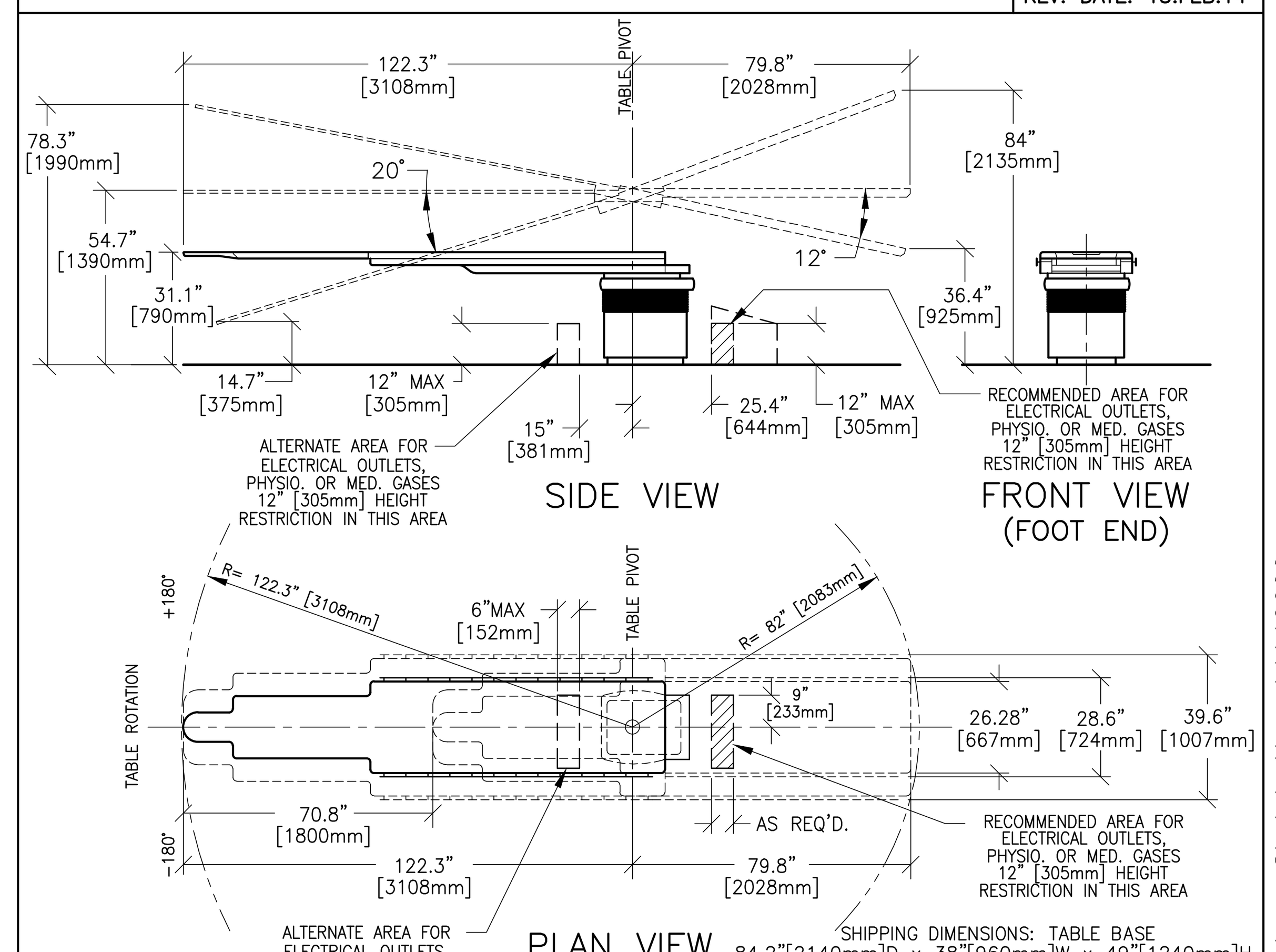
NOTE: XR–BUZZER BRACKET IS MOUNTED ON WALL, ABOVE CEILING. PLACE SPEAKER ABOVE GRILLED CEILING TILE FOR SOUND PENETRATION.

DETAIL NOT TO SCALE

EQUIPMENT DETAIL
OMEGA IQ TABLE

B8162

REV. DATE: 13.FEB.14



SHIPPING DIMENSIONS: TABLE BASE 84.2"[2140mm]D x 38"[960mm]W x 49"[1240mm]H
SHIPPING DIMENSIONS: TABLE TOP 33"[840mm]D x 137"[3470mm]W x 9"[220mm]H

DETAIL NOT TO SCALE

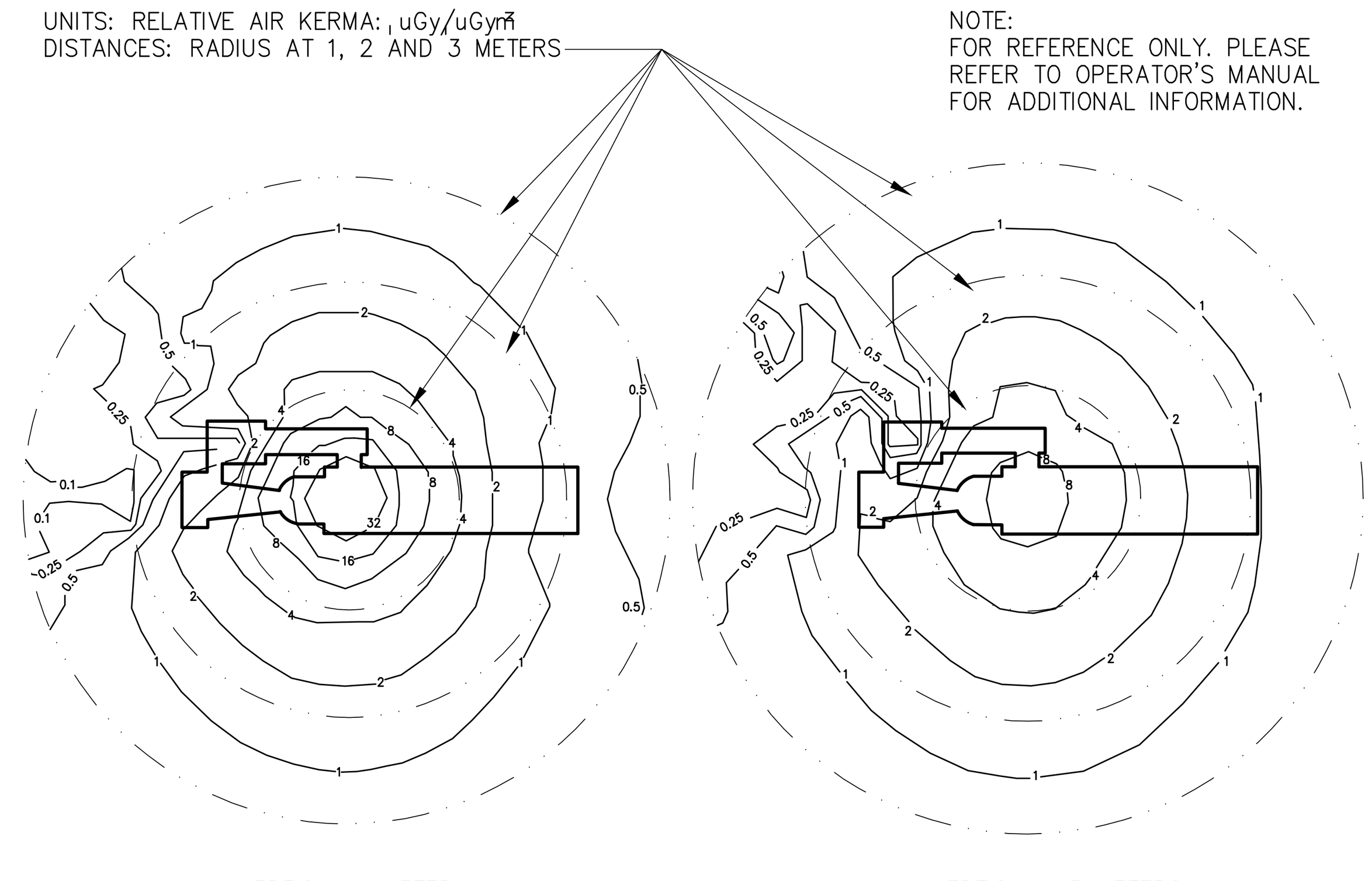
EQUIPMENT DETAIL
DISCOVERY IGS RADIATION SCATTER PLOTS

B5050S

REV. DATE: 18.JUL.12

UNITS: RELATIVE AIR KERMA: uGy/uGym²
DISTANCES: RADIUS AT 1, 2 AND 3 METERS

NOTE:
FOR REFERENCE ONLY. PLEASE REFER TO OPERATOR'S MANUAL FOR ADDITIONAL INFORMATION.



5–1 GANTRY IN VERTICAL POSITION – DOSE AT 1 METER FROM GROUND

5–2 GANTRY IN VERTICAL POSITION – DOSE AT 1.5 METER FROM GROUND

DETAIL NOT TO SCALE

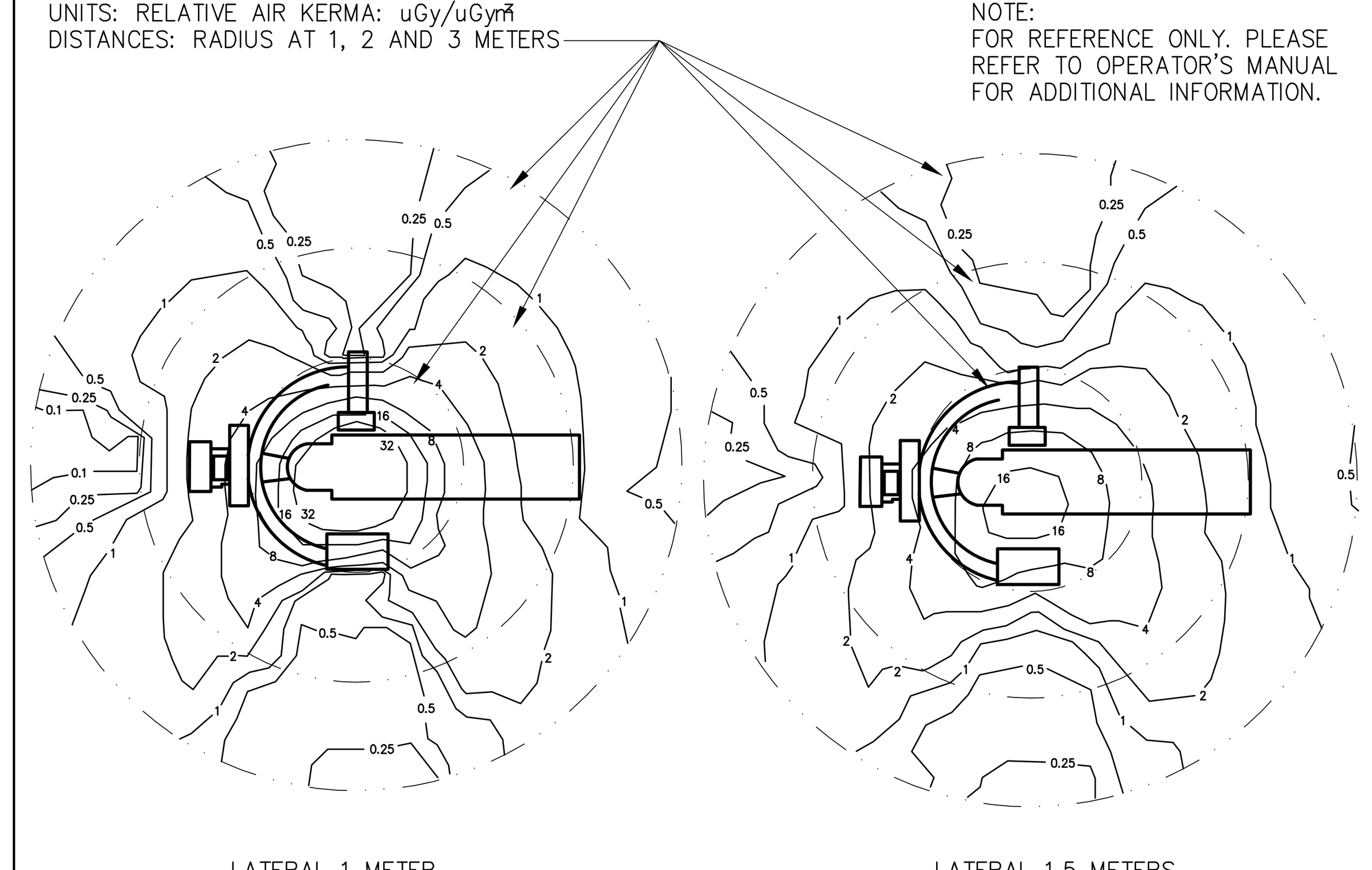
EQUIPMENT DETAIL
DISCOVERY IGS RADIATION SCATTER PLOTS

B5050T

REV. DATE: 18.JUL.12

UNITS: RELATIVE AIR KERMA: uGy/uGym²
DISTANCES: RADIUS AT 1, 2 AND 3 METERS

NOTE:
FOR REFERENCE ONLY. PLEASE REFER TO OPERATOR'S MANUAL FOR ADDITIONAL INFORMATION.



5–3 GANTRY IN LATERAL POSITION – DOSE AT 1 METER FROM GROUND

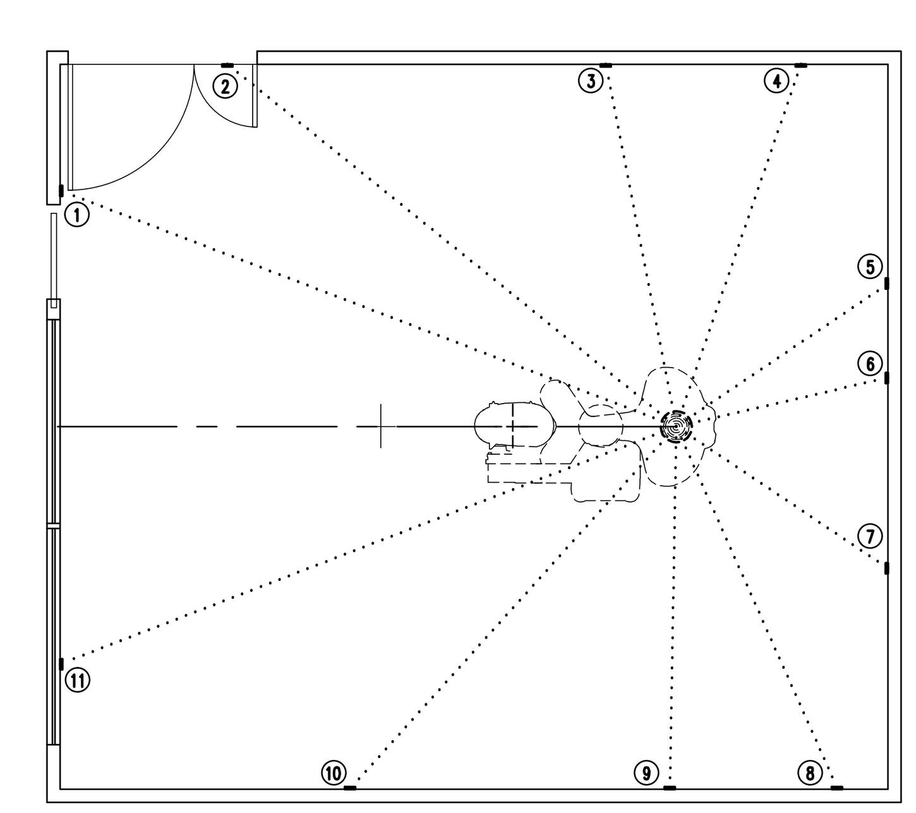
5–4 GANTRY IN LATERAL POSITION – DOSE AT 1.5 METER FROM GROUND

DETAIL NOT TO SCALE

EQUIPMENT DETAIL
LASER TARGET IMPLEMENTATION

B–IGS10

REV. DATE: 30.AUG.12



REFLECTOR ID:	ANGLE:
1	21°
2	39°
3	79°
4	109°
5	146°
6	167°
7	214°
8	246°
9	271°
10	312°
11	339°

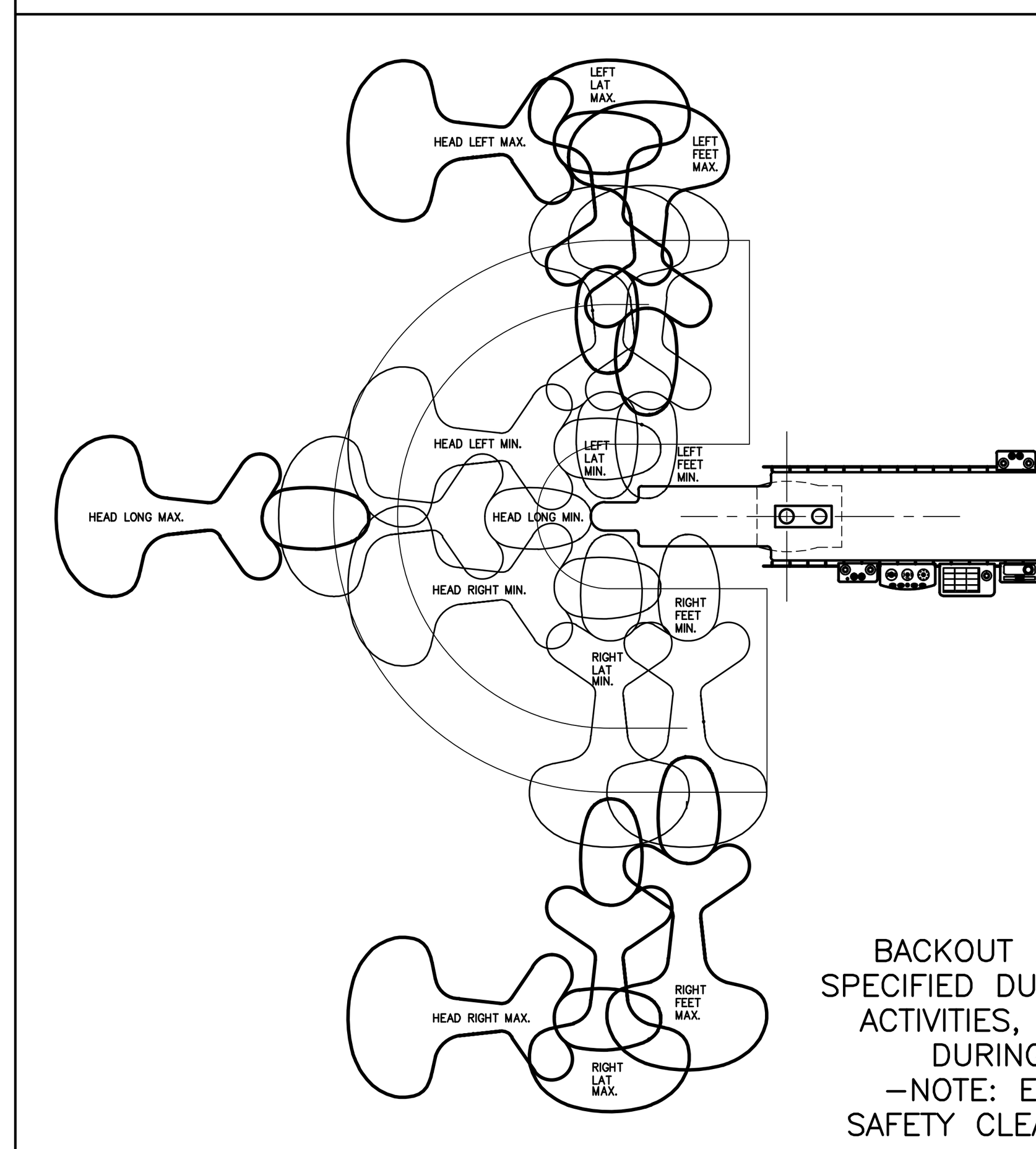
DETAIL NOT TO SCALE

EQUIPMENT DETAIL
GANTRY BACKOUT POSITIONS

B–IGS11

REV. DATE: 22.JAN.13

BACKOUT	DISTANCE	DISTANCE MIN	MAX. CONFIGURABLE VALUE
LEFT FEET	900MM 35.4"	500MM 19.7"	1100MM 43.30"
LEFT LAT	900MM 35.4"	500MM 19.7"	1400MM 55.11"
HEAD LEFT	2700MM 106.3"	500MM 19.7"	2700MM 106.29"
HEAD LONG	1200MM 47.2"	500MM 19.7"	2100MM 82.67"
HEAD RIGHT	2700MM 106.3"	500MM 19.7"	3600MM 141.73"
RIGHT LAT	900MM 35.4"	500MM 19.7"	2400MM 94.48"
RIGHT FEET	900MM 35.4"	500MM 19.7"	2100MM 82.67"



BACKOUT POSITIONS NEED TO BE SPECIFIED DURING THE ROOM PLANNING ACTIVITIES, AND ARE CUSTOMIZABLE DURING THE INSTALLATION.
–NOTE: EQUIPMENT REQUIRES A SAFETY CLEARANCE ZONE OF 500MM

DETAIL NOT TO SCALE

THIS SHEET IS PART OF THE DOCUMENT SET LISTED ON SHEET C1 AND SHOULD NOT BE SEPARATED

RQ – 144293 PIM R1 This drawing is based on Sketch No.: 14146600

GE Healthcare
Healthcare Project Implementation – Design Center
Milwaukee, Wisconsin

SHEET TITLE: EQUIPMENT DETAILS
MODALITY TYPE: DISCOVERY 730 (OR)

PROJECT TITLE: V A PALO ALTO
PALO ALTO, CALIFORNIA

PROJECT	REVISION
141466	01

DATE: 19.Jun.14
DRAWN BY: TST
CHECKED BY: LLM
QT. NO: PR11C12818V1
QT. DT: 01.May.14

REVISION HISTORY:

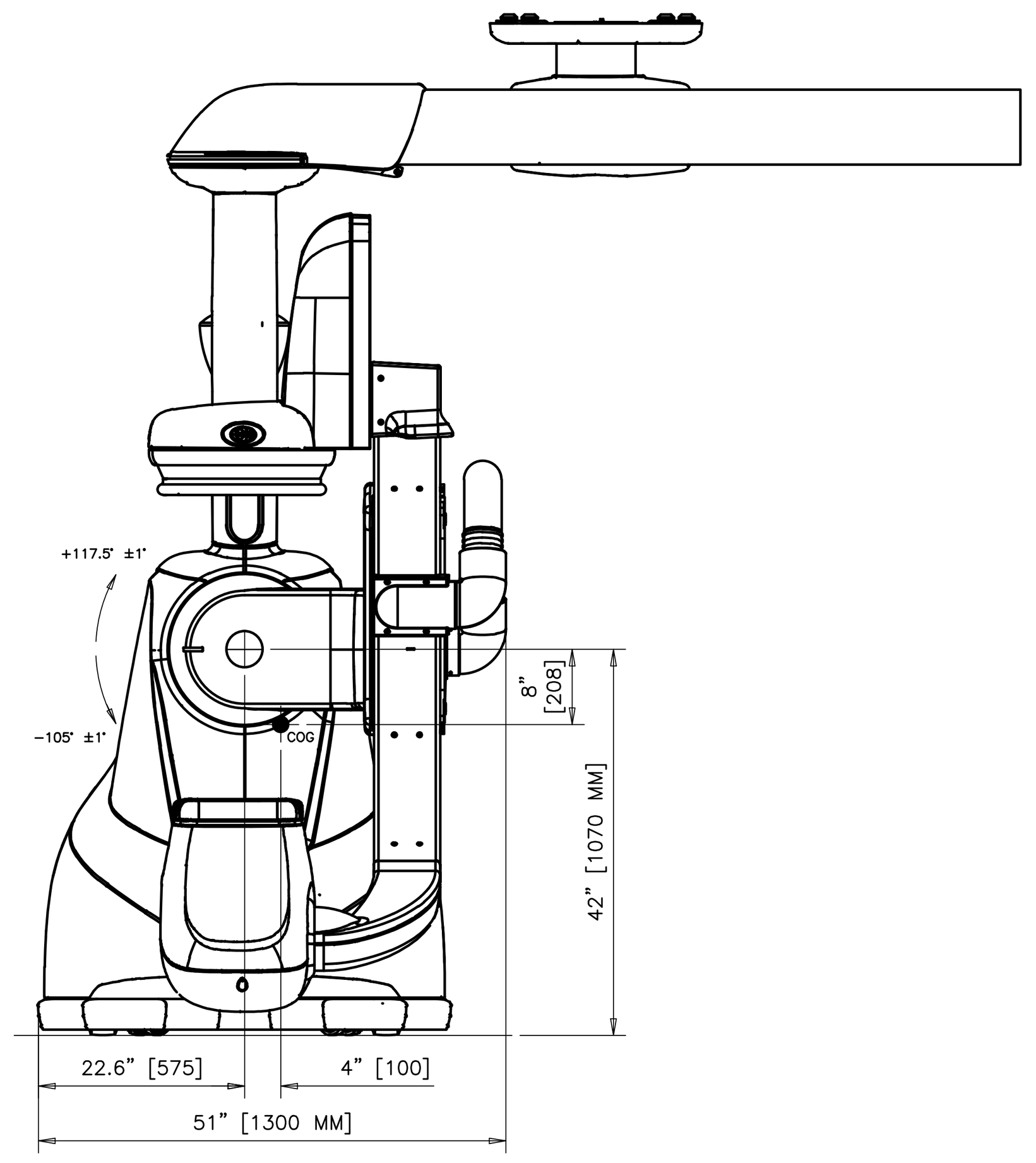
SHEET
D2

NFSH–1002

EQUIPMENT DETAIL
DISCOVERY IGS POSITIONER – FRONT VIEW

B–IGS01

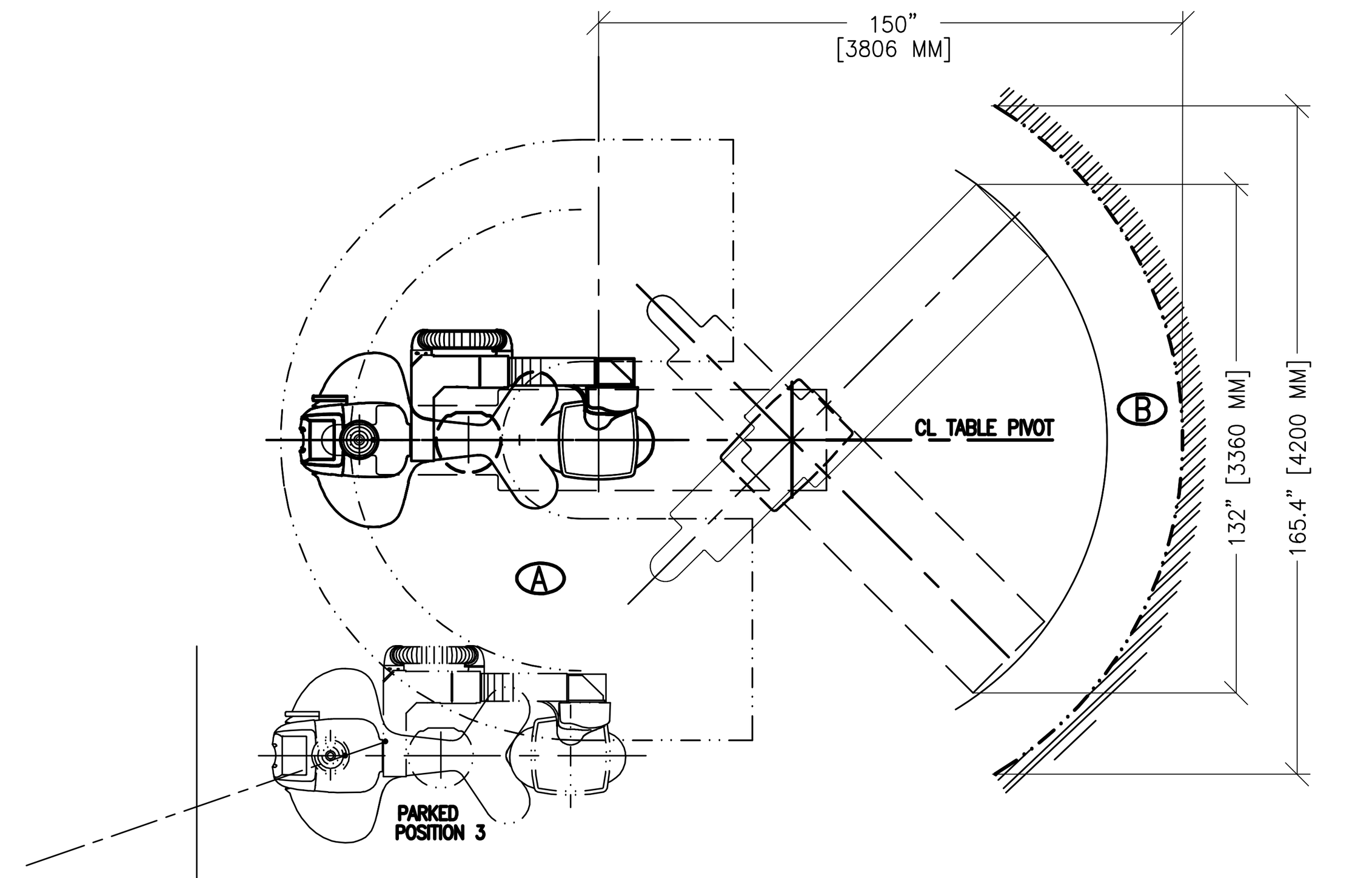
REV. DATE: 10.APR.12



EQUIPMENT DETAIL
AREA OF WORKING POSITION

B–IGS08

REV. DATE: 12.JUL.12



(A) AREA OF GANTRY TRAVEL

(B) AREA WITHIN ZONE MUST BE FREE FROM ANY FIXED OBJECTS FOR EMERGENCY RESUSCITATION

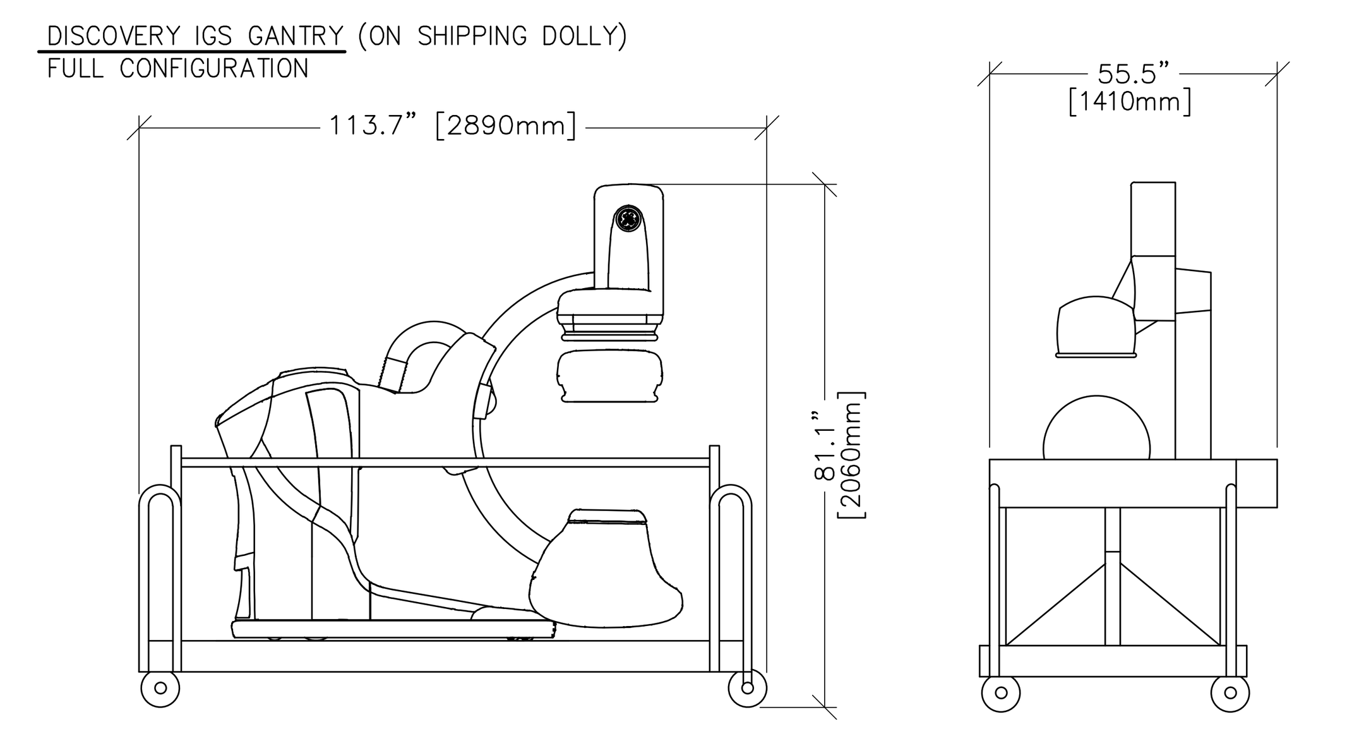
DETAIL NOT TO SCALE

EQUIPMENT DETAIL
SHIPPING DOLLY FOR DISCOVERY IGS GANTRY

B–IGS12

REV. DATE: 26.JUN.13

DISCOVERY IGS GANTRY (ON SHIPPING DOLLY)
FULL CONFIGURATION



GANTRY (MOVING): LEFT TOP HANDLE REMOVED AND RIGHT TOP HANDLE INSIDE. HEIGHT: 81.1"[2060 MM]/ WIDTH: 50.4"[1280 MM]/ LENGTH: 113.7"[2890 MM]

GANTRY (MOVING): SHORT LIFTS CONFIGURATION.
HEIGHT: 83.5"[2120 MM] / WIDTH: 50.4"[1280 MM] / LENGTH: 90.5"[2300 MM]

GANTRY (MOVING): NO DOLLY CONFIGURATION.
HEIGHT: 78.7"[2000 MM] / WIDTH: 49.6"[1260 MM] / LENGTH: 84.6"[2150 MM]

NOTE: DOLLY CAN BE REMOVED TO FACILITATE MOVEMENT OF DISCOVERY GANTRY INTO EXAM ROOM.

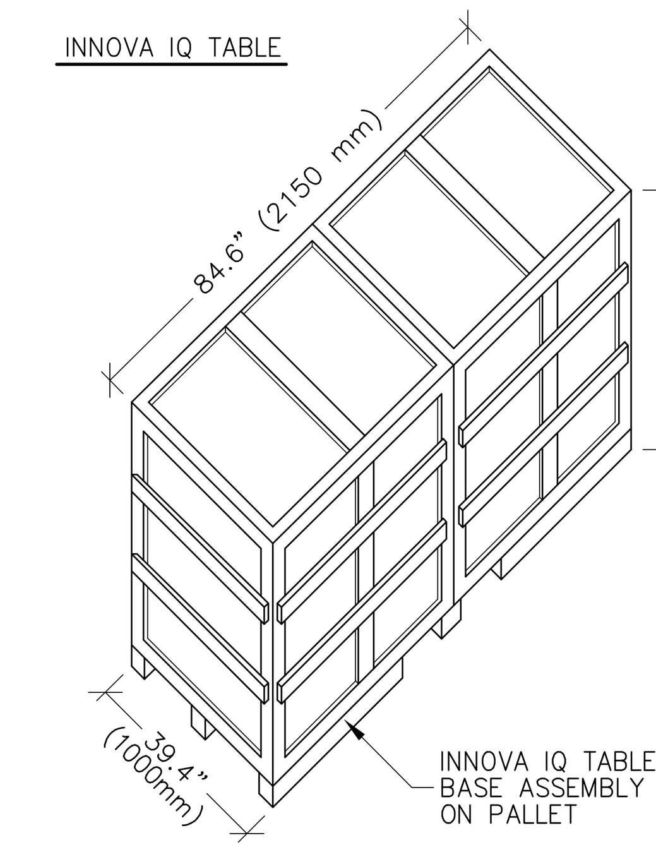
SHIPPING WEIGHT (FULL CONFIGURATION): 2425 lbs. [1100 kg]

DETAIL NOT TO SCALE

EQUIPMENT DETAIL
SHIPPING CRATE FOR IQ TABLE; DISCOVERY SYSTEM

B–IGS13

REV. DATE: 25.JUL.12



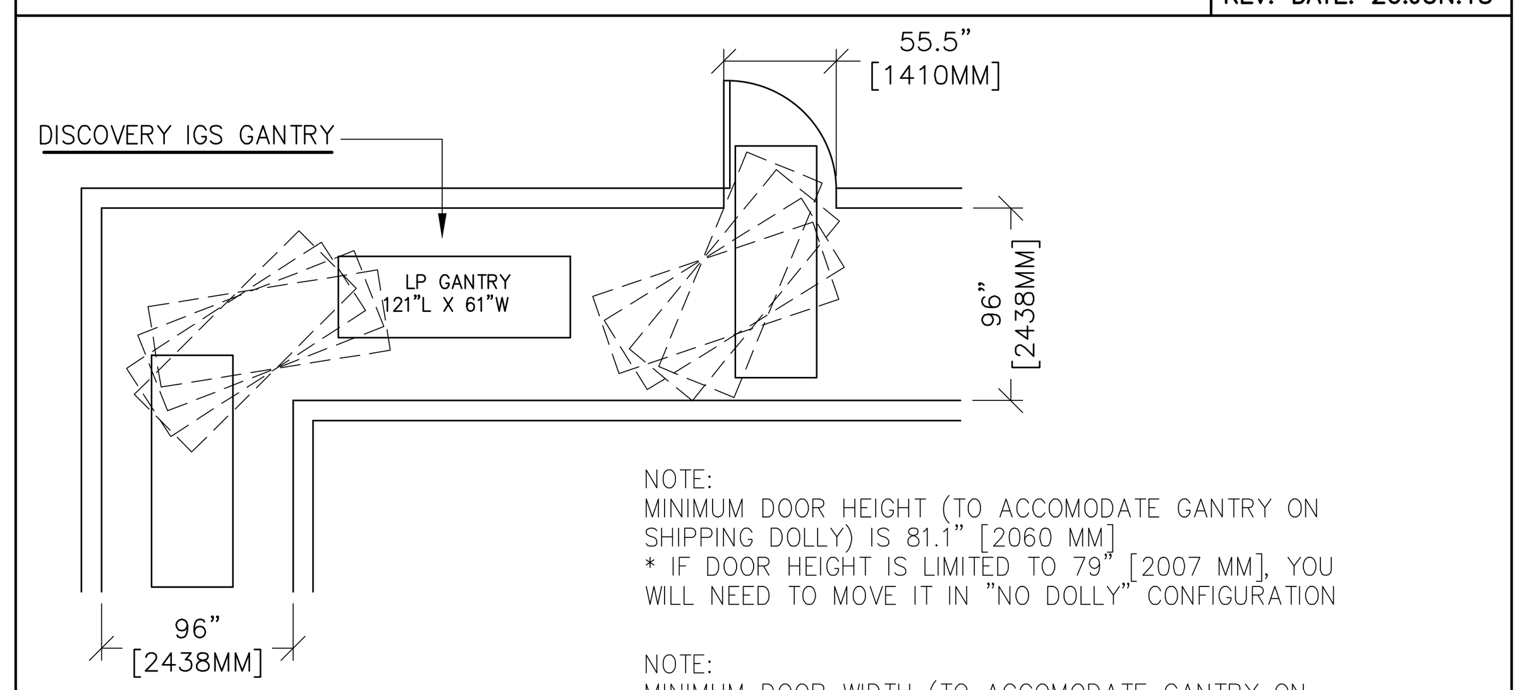
SHIPPING WEIGHT: 1653 lbs (750 kg)

DETAIL NOT TO SCALE

EQUIPMENT DETAIL
DISCOVERY IGS – GANTRY DELIVERY PATH

B–IGS14

REV. DATE: 26.JUN.13



NOTE:
MINIMUM DOOR HEIGHT (TO ACCOMODATE GANTRY ON SHIPPING DOLLY) IS 81.1" [2060 MM]
* IF DOOR HEIGHT IS LIMITED TO 79" [2007 MM], YOU WILL NEED TO MOVE IT IN "NO DOLLY" CONFIGURATION

NOTE:
MINIMUM DOOR WIDTH (TO ACCOMODATE GANTRY ON SHIPPING DOLLY) IS:
– 55.5" [1410 MM] WITH PROTECTIVE SIDE RAIL
– 50.4" [1280 MM] WITH LEFT TOP HANDLE REMOVED AND RIGHT TOP HANDLE INSIDE

CORRIDOR WIDTH (FOR GANTRY DELIVERY)	DOOR SIZE (FOR GANTRY DELIVERY)
96" WIDE	55.5" OPENING

NOTE:
DOOR WIDTHS ARE BASED ON A "STRAIGHT–IN" APPROACH, REQUIRING A 96" [2438 MM] WIDE CORRIDOR.

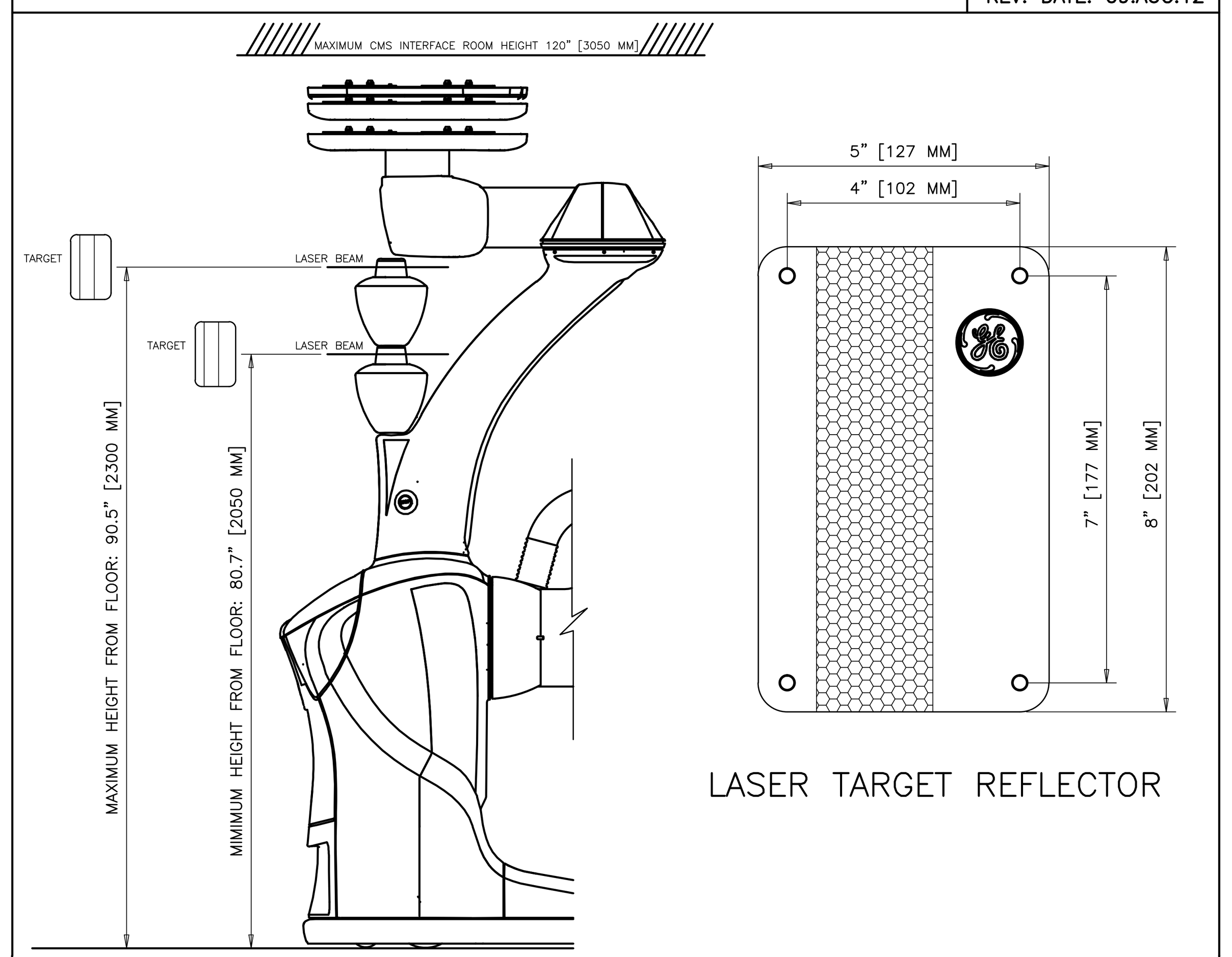
NOTE:
WHEN DELIVERING GANTRY FROM CORRIDOR TO CORRIDOR, THE SAME HOLDS TRUE AS CORRIDOR TO DOOR SIZE.

DETAIL NOT TO SCALE

EQUIPMENT DETAIL
LASER TARGET REFLECTOR

B–IGS07

REV. DATE: 09.AUG.12



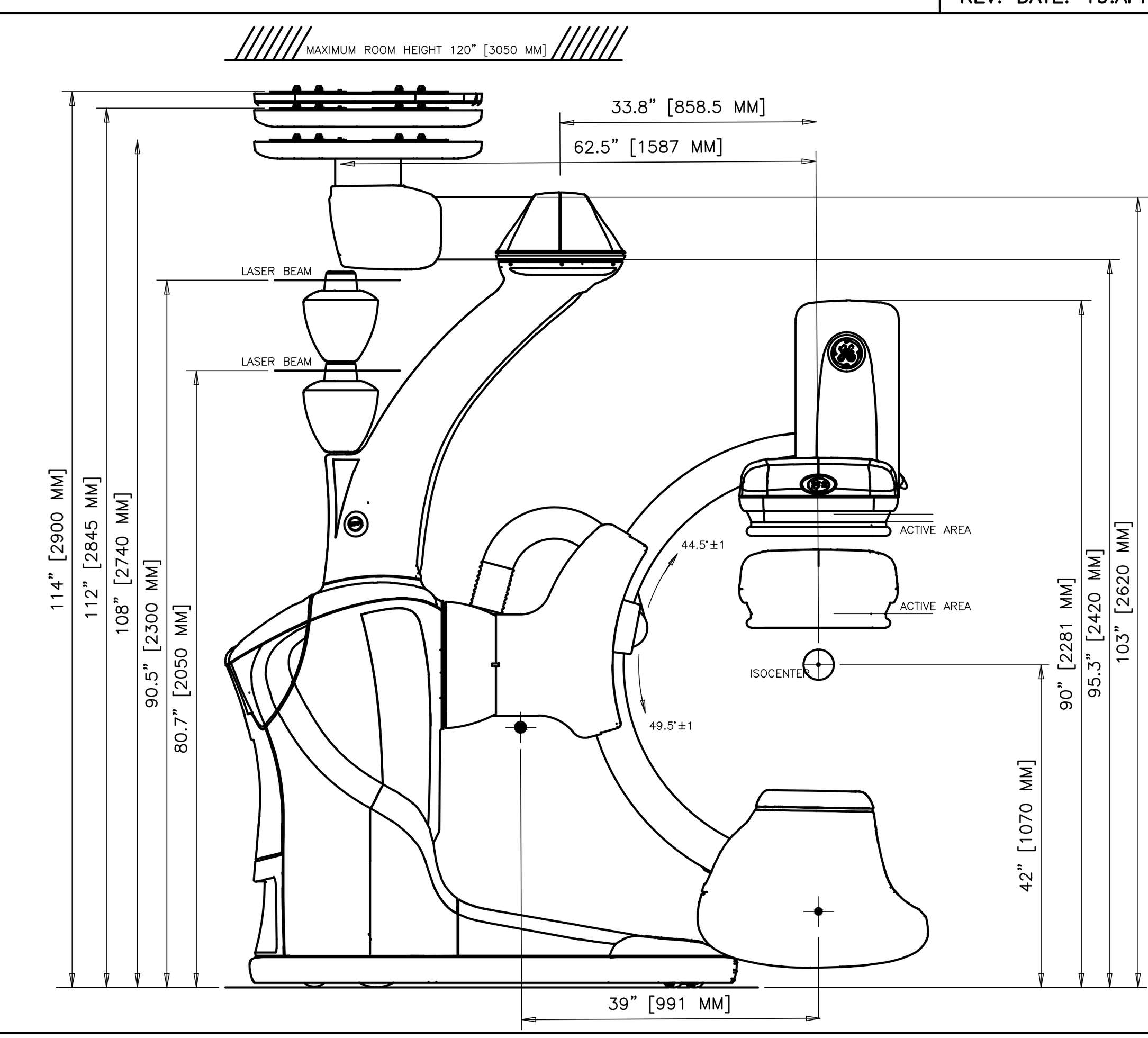
LASER TARGET REFLECTOR

DETAIL NOT TO SCALE

EQUIPMENT DETAIL
DISCOVERY IGS POSITIONER – SIDE VIEW

B–IGS02

REV. DATE: 19.APR.12

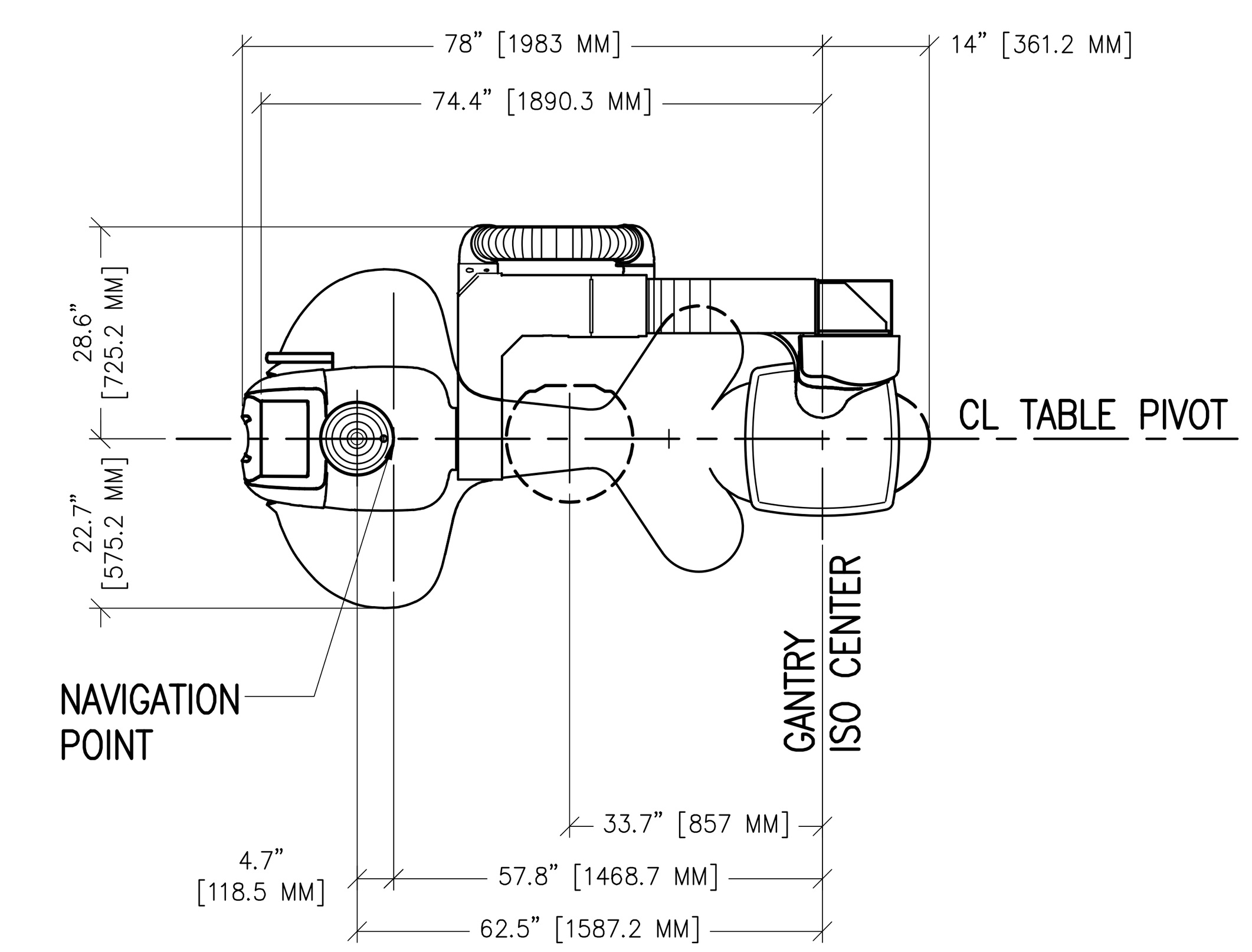


DETAIL NOT TO SCALE

EQUIPMENT DETAIL
DISCOVERY IGS GANTRY; TOP VIEW

B–IGS18

REV. DATE: 11.SEP.12

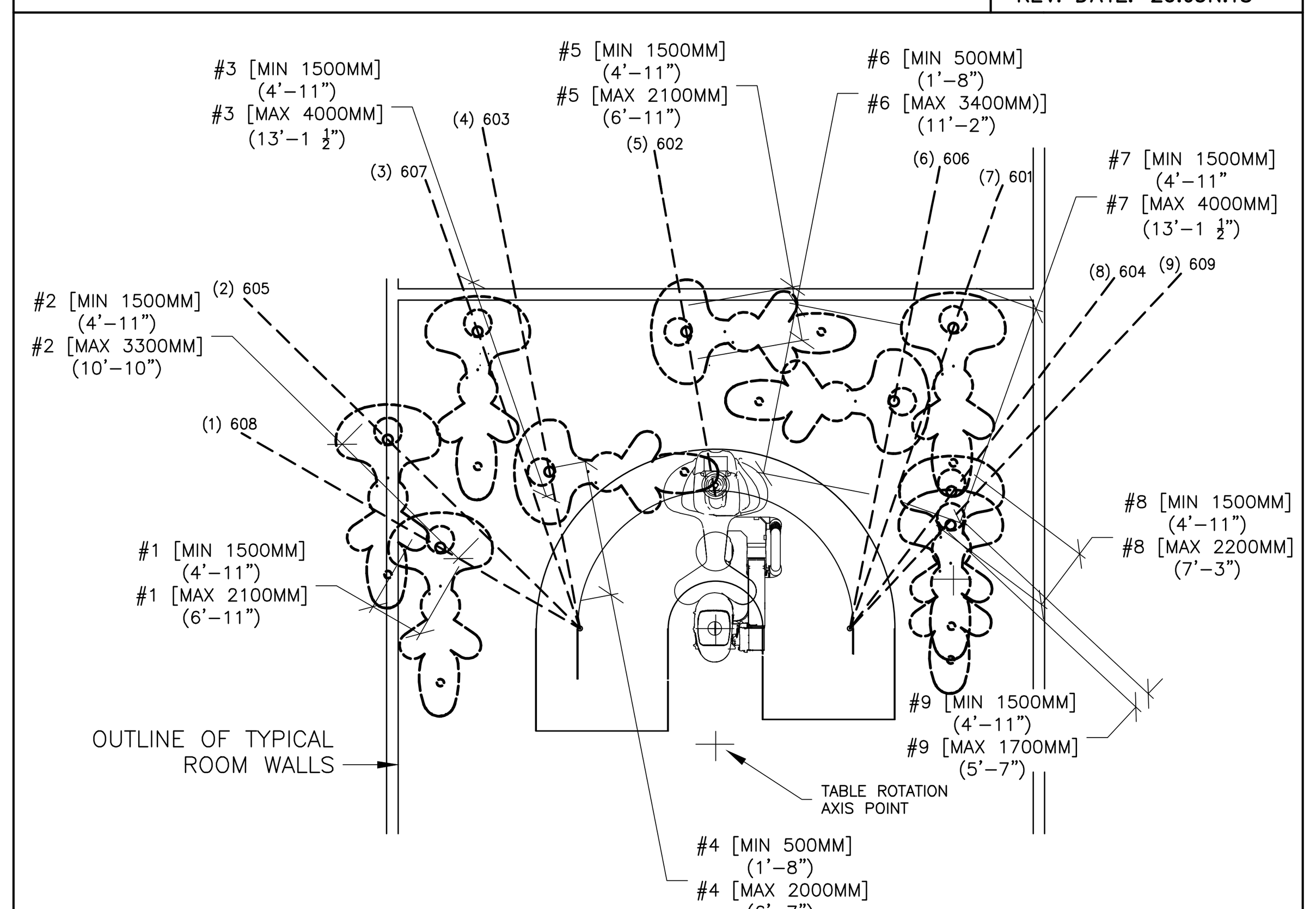


DETAIL NOT TO SCALE

EQUIPMENT DETAIL
MINIMUM/MAXIMUM PARKING POSITIONS

B–IGS17

REV. DATE: 26.JUN.13



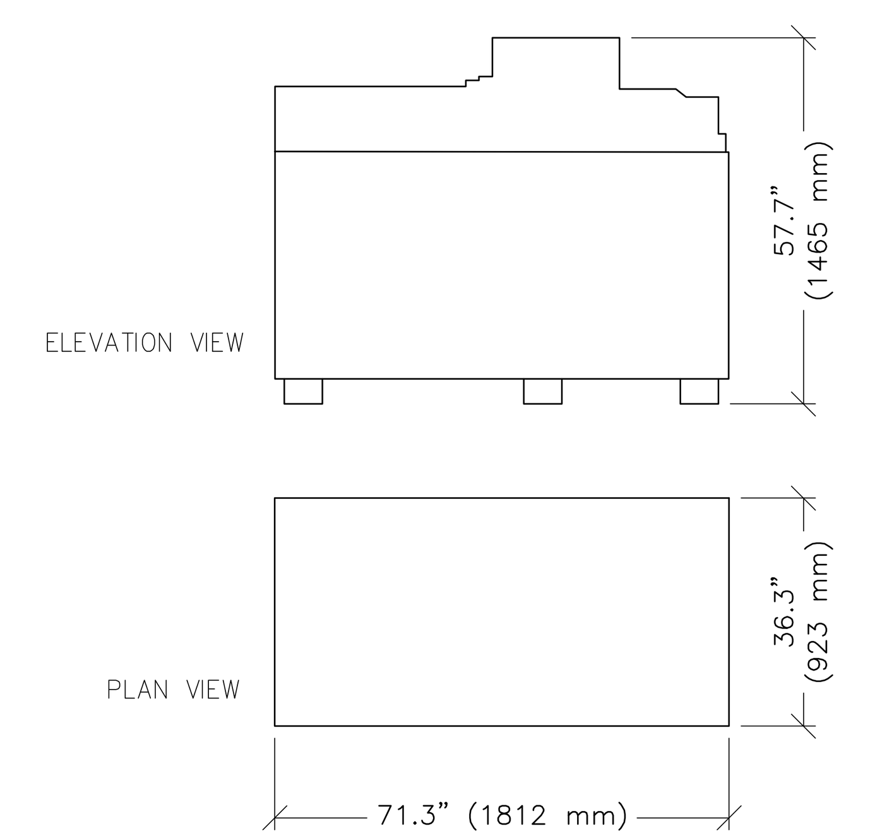
NOTE: NEED TO MAINTAIN A MINIMUM SAFETY CLEARANCE OF 19.68" [500MM] BETWEEN THE GANTRY PARKING POSITION AND ANY FIXED ELEMENT (STRUCTURAL OR FURNITURE)

DETAIL NOT TO SCALE

EQUIPMENT DETAIL
CABLE MANAGEMENT SYSTEM ON SHIPPING DOLLY

B–IGS15

REV. DATE: 26.JUL.12



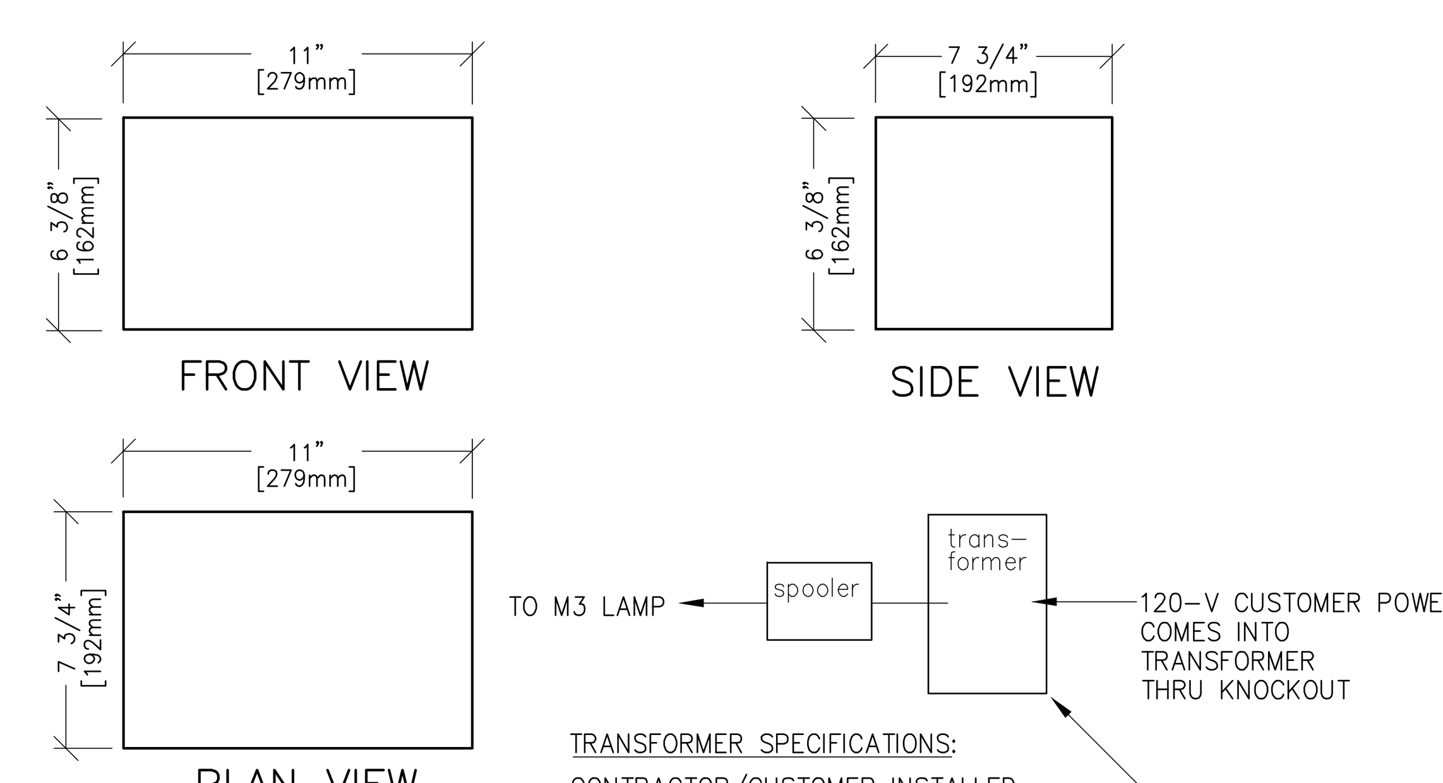
SHIPPING WEIGHT: 1047 LBS. (475 kg)

DETAIL NOT TO SCALE

EQUIPMENT DETAIL
MAVIG MACH 3 EXTERNAL TRANSFORMER–TRACK MOUNT

CMACH3

REV. DATE: 06/24/09



TRANSFORMER SPECIFICATIONS:
- CONTRACTOR/CUSTOMER INSTALLED
- SIZE = 11" L x 7 3/4" W x 6 3/8" H
- WEIGHT = 71 LBS
- MOUNTING – ABOVE CEILING NEAR SPOOLER OR ON SHELF IN EQUIPMENT RM.
- ELECTRICAL REQUIREMENTS...
  120–V to TRANS. = 1–BLACK,1–WHITE,1–GREEN (SIZE AS REQ'D.)
  TRANS. to SPOOLER = 1–BLACK,1–WHITE,1–GREEEN (SIZE AS REQ'D.)
  SPOOLER to LAMP = WIRES SUPPLIED WITH SPOOLER

DETAIL NOT TO SCALE

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This drawing is based on Sketch No.: 14146600

PIM R1

RQ – 144293

GE Healthcare

Healthcare Project Implementation – Design Center
Milwaukee, Wisconsin

SHEET TITLE: EQUIPMENT DETAILS

MODALITY TYPE: DISCOVERY 730 (OR)

PROJECT TITLE: V A PALO ALTO

PALO ALTO, CALIFORNIA

PROJECT	REVISION
141466	01

DATE: 19.Jun.14
DRAWN BY: TST
CHECKED BY: LLM
QT. NO: PR11C12818V1
QT. DT: 01.May.14

REVISION HISTORY:

SHEET
D3

NFSH–1002